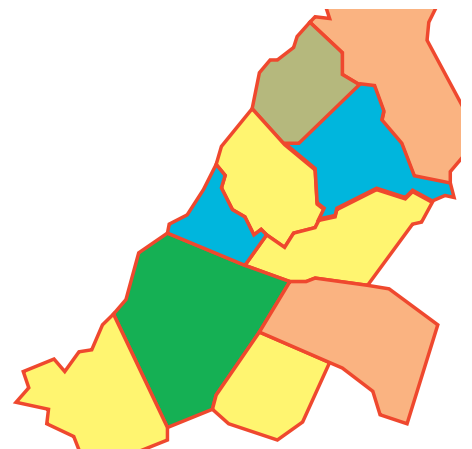
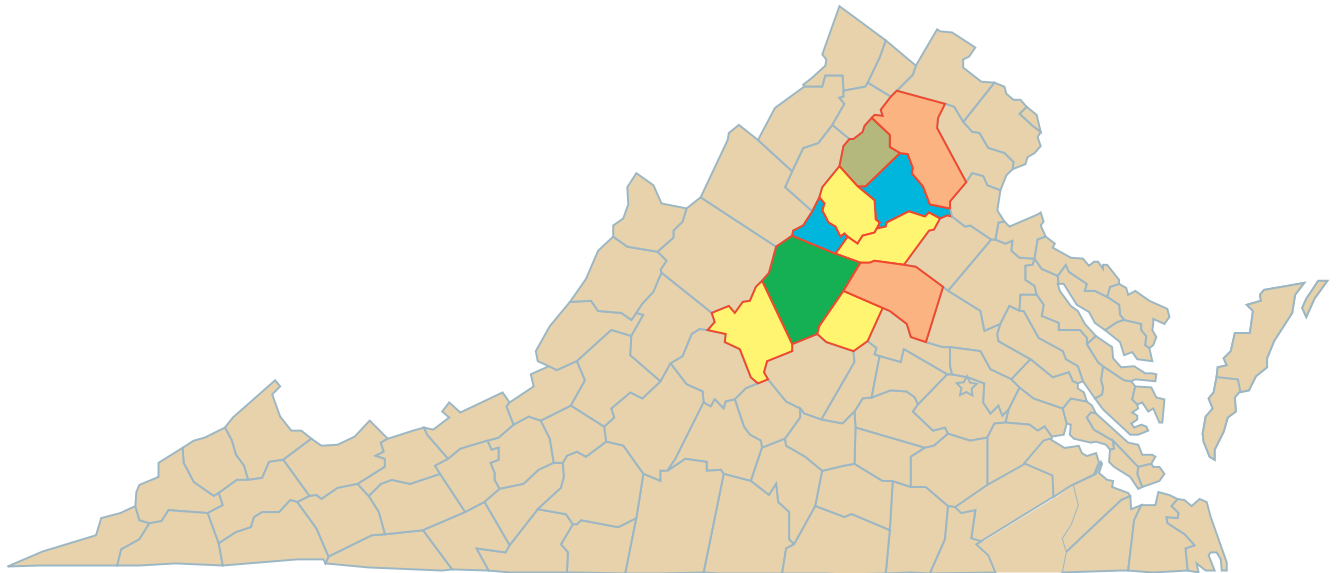
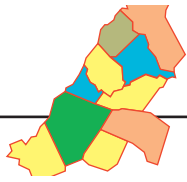


Community Profile of WIA VI

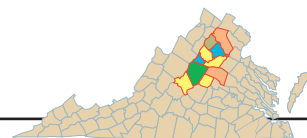
Albemarle County • Culpeper County • Fauquier County • Fluvanna County •
Greene County • Loudoun County • Madison County • Nelson County • Orange County •
Rappahannock County • Charlottesville city



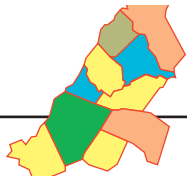


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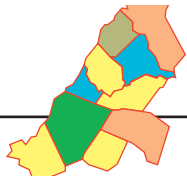
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Executive Summary

This report provides a demographic, economic, and educational profile of Workforce Investment Area VI (WIA VI), Workforce Today. The purpose of these profiles is to assist on-going strategic planning efforts by providing a solid, data-driven, foundation for strategic decision-making. The primary findings from this report are:

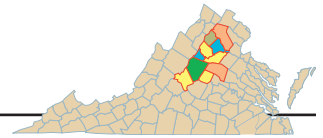
- Between 2000 and 2010, WIA VI will experience a major increase in its 55 and over population. The net result of this trend will be a significant “graying” of the overall population.
- One implication of this trend is that younger entry-level workers will be in short supply.
- WIA VI is experiencing, and will likely continue to experience, a shift away from employment in Government and toward employment in Services and Retail Trade.
- One implication of this shift is that the Service sector – specifically, health care and education – is expected to account for much of the demand for trained workers between 1998 and 2008.
- Another implication is likely downward pressure on wages. Whereas Government comprised the 8th highest wage sector in the local economy, Retail Trade ranks 18th, Education 14th, and Health Care 10th.



I. Introduction

This report provides a community profile of Workforce Investment Area VI (WIA VI). It was produced by the Virginia Employment Commission, with assistance from the Virginia Community College System and the Virginia Economic Development Partnership, at the request of the Special Advisor to the Governor for Workforce Development. It is intended to assist on-going strategic planning efforts within the Workforce Investment Boards by providing a solid, data-driven, foundation for strategic decision-making.

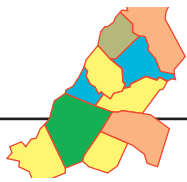
The report is divided into four major sections. The first contains a profile of regional demographic characteristics and trends, the second supplies similar information for the regional economy, and the third provides a profile of regional education characteristics and projected demands for training and skills. These are followed by a summary and conclusion section.



II. Demographic Profile

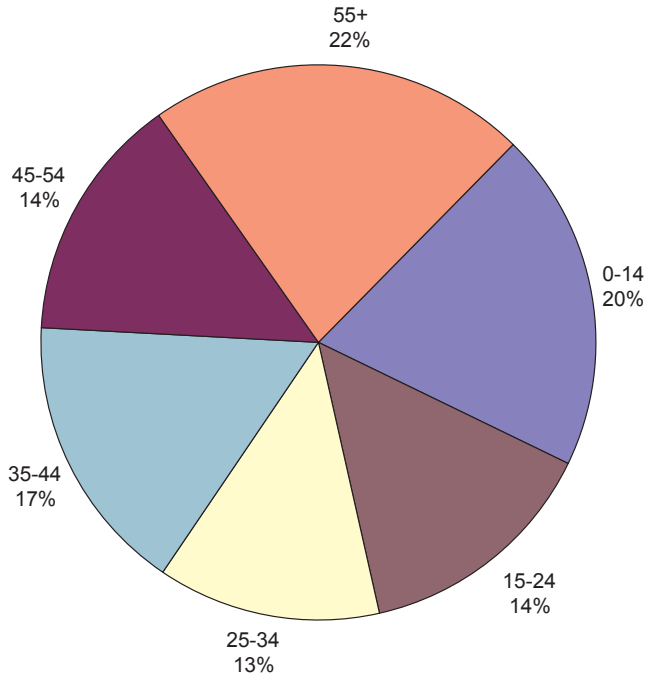
Population demographics are the single most important factor affecting WIA VI's future labor force. Some key features of the area's population are as follows:

- Smaller proportion of minorities. Where statewide minorities comprise 28 percent of the overall population, in WIA VI they comprise 18 percent of the population.
- Projected to increase by 54,767 persons (or 16.4 percent) between 2000 and 2010. The largest increase is expected in Fauquier County (13,061), followed by Albemarle County (13,014), and Fluvanna County (8,053).
- Smaller proportion of individuals who "speak English less than well". Where statewide the proportion of individuals five and older who speak English less than well is 2.2 percent, in WIA VI it is only 0.9 percent.
- The city of Charlottesville draws the largest number of in-commuters (23,472) of any locality within WIA VI, followed by Albemarle County (22,428) and Fauquier County (6,904). The majority of these in-commuters originate from within WIA VI. On the whole, WIA VI is a net exporter of workers with 17,115 individuals commuting into the area for work, while 34,812 of the area's residents commute to localities outside of WIA VI for work.

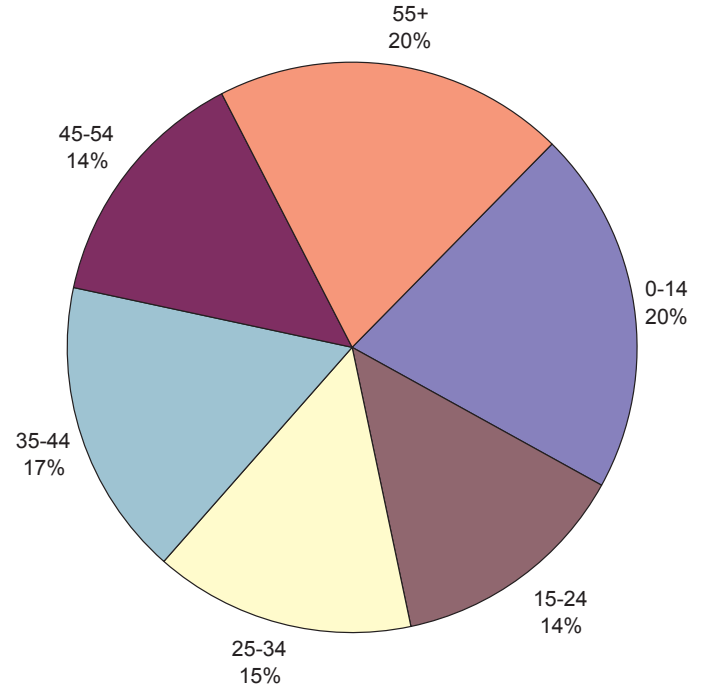


Population by Age Cohort

WIA VI



Virginia



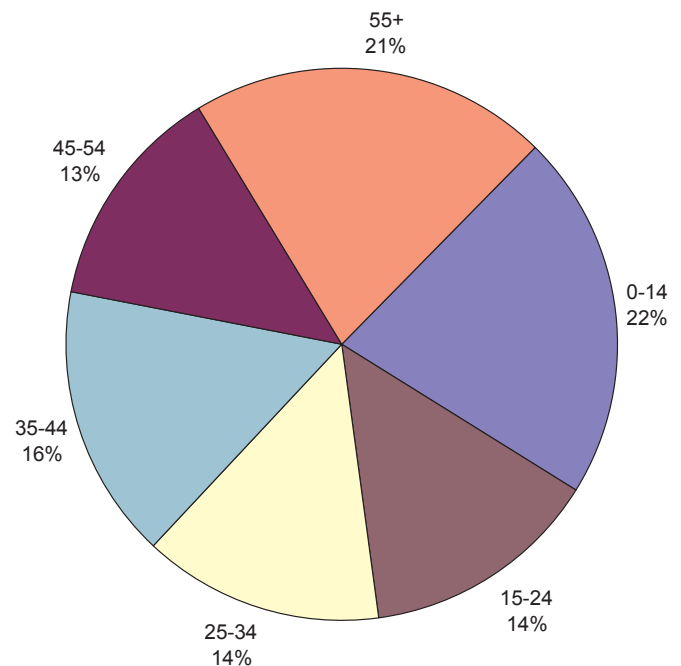
WIA VI

0-14	66,136
15-24	47,062
25-34	43,416
35-44	55,553
45-54	48,061
55+	74,205
Total	334,433

Virginia

0-14	1,453,452
15-24	963,469
25-34	1,036,911
35-44	1,200,950
45-54	999,548
55+	1,424,169
Total	7,078,494

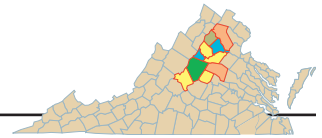
United States



United States

0-14	60,253,375
15-24	39,183,890
25-34	39,891,724
35-44	45,148,527
45-54	37,677,952
55+	59,266,437
Total	281,421,906

Subparts may not add to total due to rounding.
Source: 2000 Census.

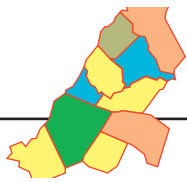


Population by Race/Ethnicity

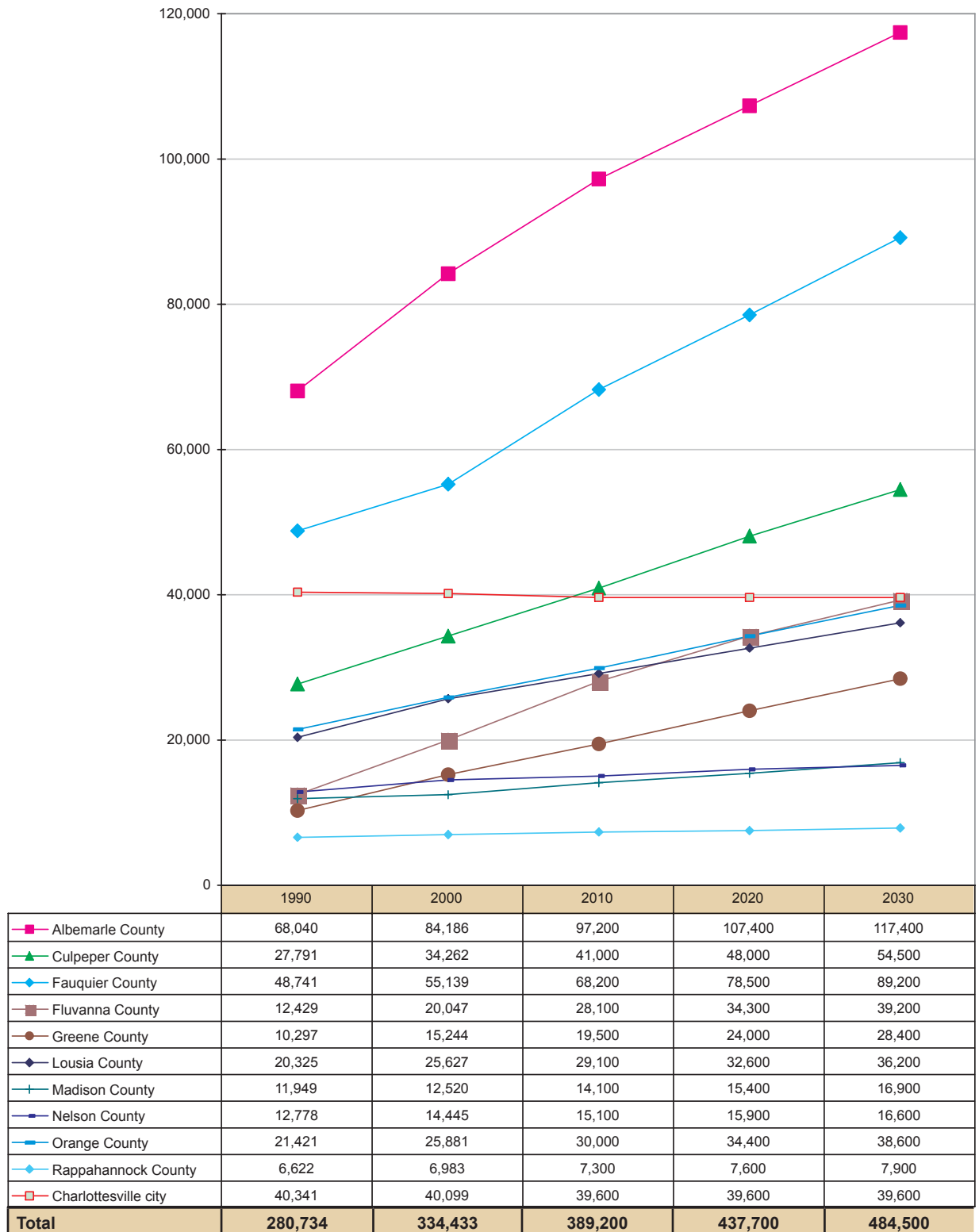
WIA VI		
Total Population	334,433	100.0%
Race		
White	274,877	82.2%
Black or African American	46,452	13.9%
American Indian and Alaska Native	725	0.2%
Asian	5,449	1.6%
Native Hawaiian and Other Pacific Islander	81	---
Other and Multi-Race	6,849	2.0%
Ethnicity		
Hispanic or Latino (of any race)	6,543	2.0%

Virginia		
Total Population	7,078,515	100.0%
Race		
White	5,120,110	72.3%
Black or African American	1,390,293	19.6%
American Indian and Alaska Native	21,172	0.3%
Asian	261,025	3.7%
Native Hawaiian and Other Pacific Islander	3,946	0.1%
Other and Multi-Race	281,969	4.0%
Ethnicity		
Hispanic or Latino (of any race)	329,540	4.7%

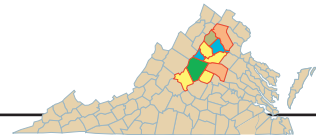
United States		
Total population	281,421,906	100.0%
Race		
One race	274,595,678	97.6%
White	211,460,626	75.1%
Black or African American	34,658,190	12.3%
American Indian and Alaska Native	2,475,956	0.9%
Asian	10,242,998	3.6%
Native Hawaiian and Other Pacific Islander	398,835	0.1%
Other and Multi-Race	22,185,301	7.9%
Ethnicity		
Hispanic or Latino (of any race)	35,305,818	12.5%



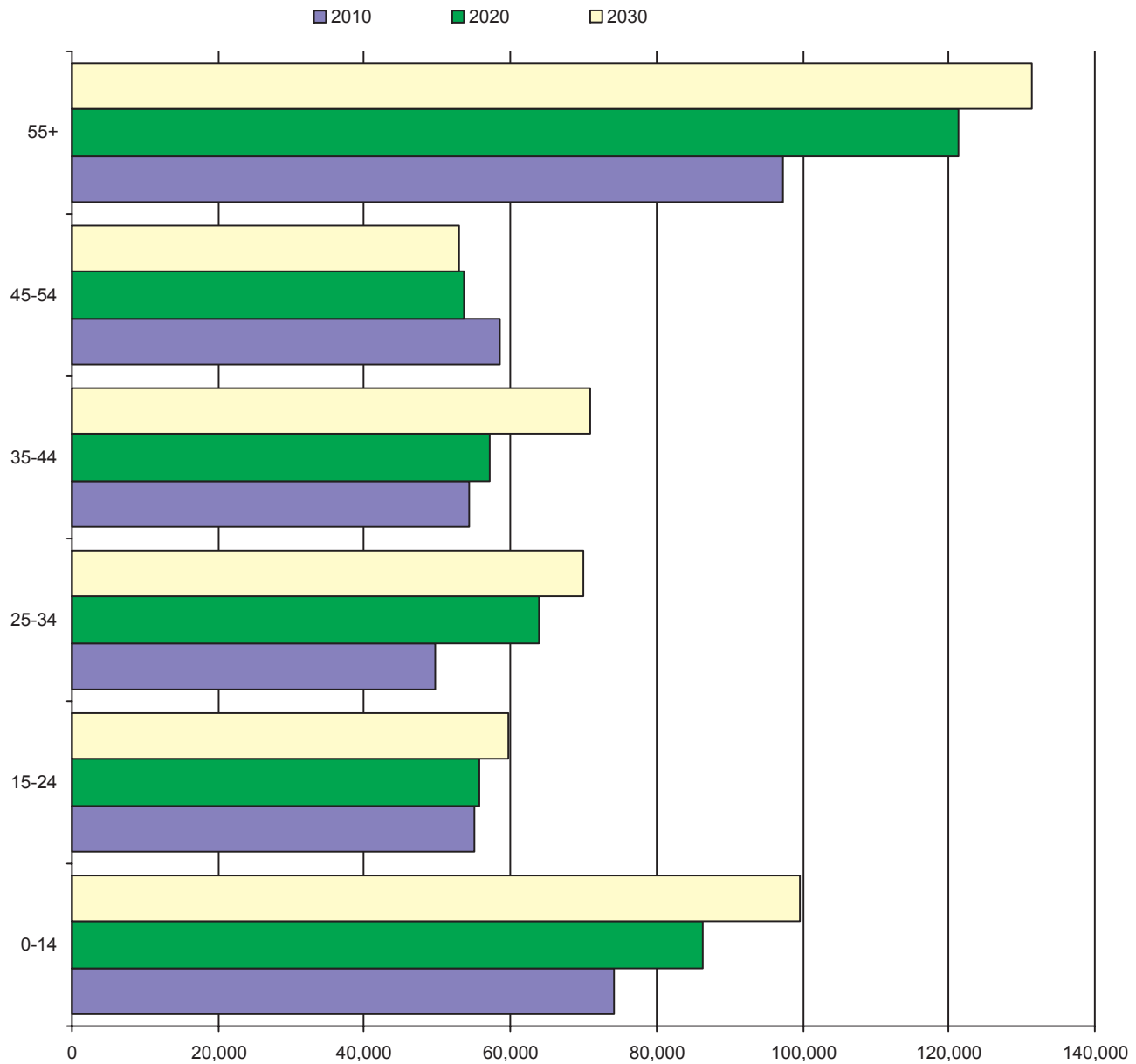
Population Change



Data for 2010 - 2030 are projections. Subparts may not add to total due to rounding.
Source: Virginia Employment Commission, 08/03, U.S. Census Bureau.



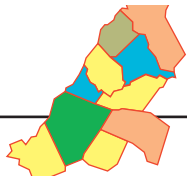
Population Projections by Age Cohort



	2010	2020	2030
0-14	74,191	86,228	99,649
15-24	54,998	55,708	59,693
25-34	49,815	63,830	69,913
35-44	54,308	57,083	70,931
45-54	58,534	53,568	53,050
55+	97,354	121,283	131,264
Total	389,200	437,700	484,500

Subparts may not add to total due to rounding.

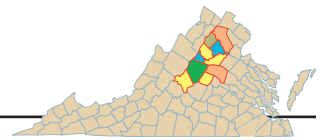
Source: Virginia Employment Commission.



English Language Skills

(Age 5 and over)

WIA VI		
	Total	Speak English less than well
Albemarle County	74,250	1,040
Culpeper County	32,091	336
Fauquier County	51,566	457
Fluvanna County	18,814	37
Greene County	14,129	50
Louisa County	24,100	49
Madison County	11,839	69
Nelson County	13,683	83
Orange County	24,368	80
Rappahannock County	6,628	69
Charlottesville city	43,051	408
WIA VI	314,519	2,678
Virginia	6,619,266	143,865
<i>Percent of Individuals who speak English less than well</i>		
Virginia	2.17%	
WIA VI	0.85%	



Commuting Patterns¹

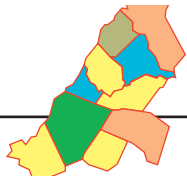
Out-Commute (From)	In-Commute (To)											
		Albemarle	Culpeper	Fauquier	Fluvanna	Greene	Louisa	Madison	Nelson	Orange	Rappahannock	Charlottesville
	Albemarle		67		325	545	287	128	208	326	7	13,886
	Culpeper	123		2,054		58	39	206		260	81	80
	Fauquier		558								100	
	Fluvanna	3,413				31	265	8		81		2,487
	Greene	2,956	78		25		131	160	8	184		1,839
	Louisa	1,248	50		194	58		33		604		892
	Madison	525	1,195	117	8	142	54			602	33	276
	Nelson	1,543			20	5	13					915
	Orange	877	868	181	27	156	584	345	11			529
	Rappahannock	19	230	507				21				
	Charlottesville	7,990			38	115	158	14	18	50		
Total To County/City From WIA VI	18,694	3,046	2,859	637	1,110	1,531	915	245	2,107	221	20,904	
Other VA Localities	3,654	1,364	3,739	681	228	1,064	124	824	523	1,648	2,568	
Maryland		17	204	23	6	19						
Washington D.C.	80	22	59	6					15			
Other Out of State			43	39	14	43		16	29	63		
Total to County/ City:	22,428	4,449	6,904	1,386	1,358	2,657	1,039	1,085	2,674	1,932	23,472	
Total In State	22,348	4,410	6,598	1,318	1,338	2,595	1,039	1,069	2,630	1,869	23,472	
Total Out of State	80	39	306	68	20	62	0	16	44	63	0	

Source: "In-Commuting Patterns" and "Out-Commuting Patterns," 2000 Census data, Virginia Employment Commission, http://www.vec.state.va.us/vecportal/lbrmkt/lmi_menu.cfm

1. Empty cells within the table indicate that the area's commuting represents less than .2% of total commuting or may be zero.
2. Total Commuting to/from WIA= Other VA Localities + Out of State

Example of how to use the Commuting Patterns table:

"How many of Fauquier's residents commute to Culpeper County?" On the horizontal or To axis, locate the column labeled Culpeper. On the vertical or From axis, locate the row labeled Fauquier. The intersection of the row and column, 558, is the number of Fauquier's residents that commute to Culpeper County.

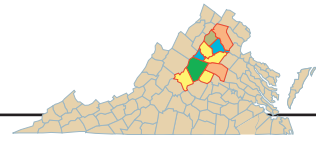


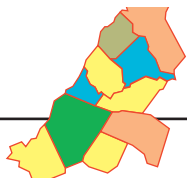
Commuting Patterns¹

Out-Commute (From)		Total From County/ City To WIA VI	Other VA Localities	Maryland	Washington D.C.	Other Out of State	Total From County/Ci ty:	Total In State	Total Out of State
	Albemarle	15,779	1,733		110	60	17,682	17,512	170
	Culpeper	2,901	4,087	145	260		7,393	6,988	405
	Fauquier	658	14,197	408	1,139		16,402	14,855	1,547
	Fluvanna	6,285	746				7,031	7,031	0
	Greene	5,381	380				5,761	5,761	0
	Louisa	3,079	4,434	38	103		7,654	7,513	141
	Madison	2,952	547			40	3,539	3,499	40
	Nelson	2,496	1,373		15	30	3,914	3,869	45
	Orange	3,578	2,795	63	161		6,597	6,373	224
	Rappahannock	777	1,037	61	112	28	2,015	1,814	201
	Charlottesville	8,383	645		65		9,093	9,028	65

Total WIA Commuting²

Total Commuting To WIA:	17,115
Total Commuting From WIA:	34,812

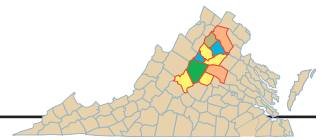




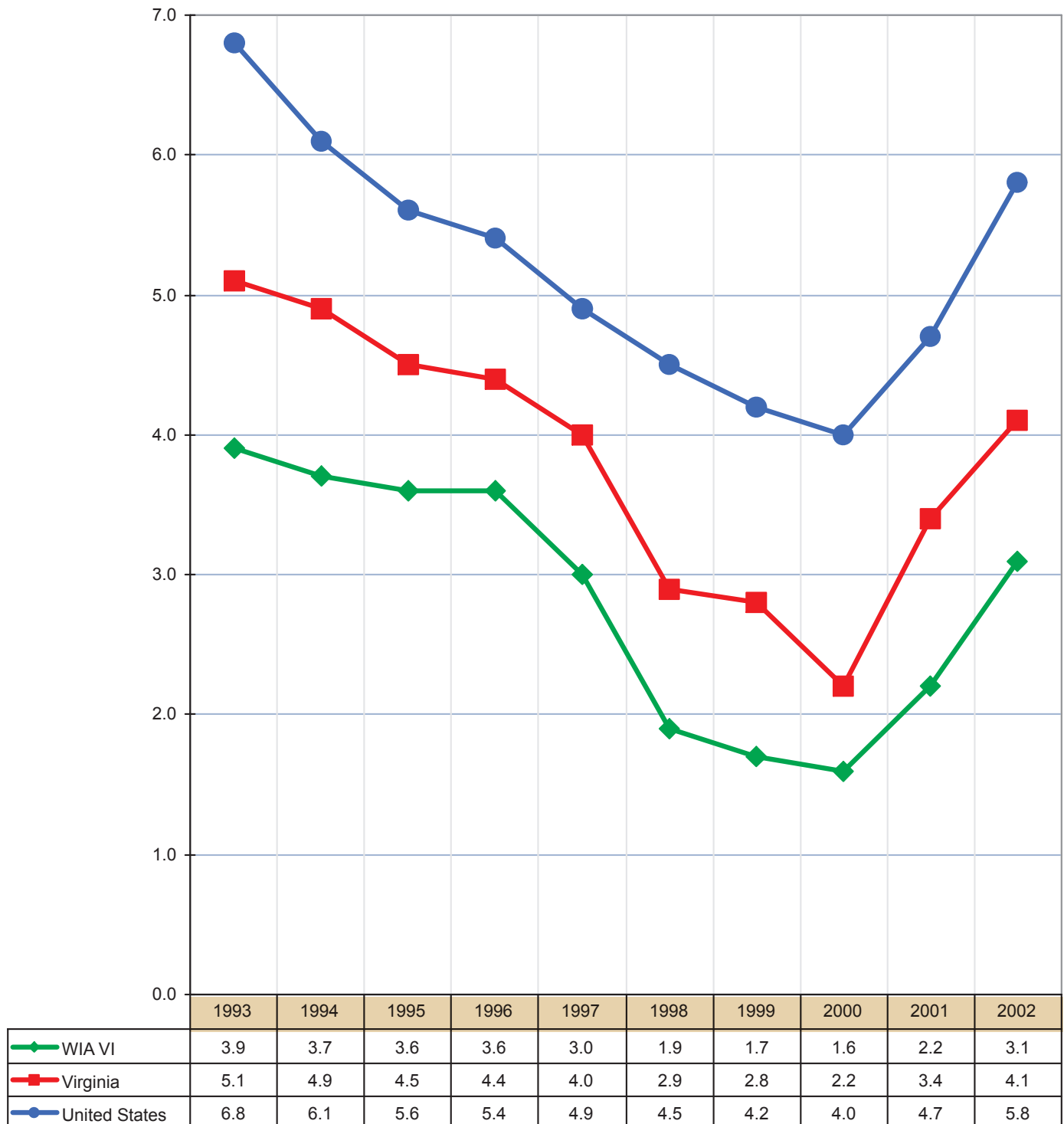
III. Economic Profile

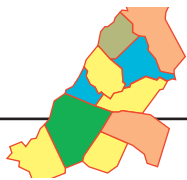
Where population demographics provide information on underlying trends within the labor force, economic data provides more detailed information on the likely demand for specific types of workers. Some key features of WIA VI's economy are as follows:

- Unemployment rates are consistently below the statewide average. WIA VI's unemployment rate is typically about one percent below the statewide average.
- Employment is concentrated in Government (26.0 percent), Retail Trade (12.2 percent), and Accommodations/Food (8.7 percent).
- Most new hires have been in Services (34.9 percent), Retail Trade (33.2 percent), and Construction (11.7 percent).
- Overall personnel turnover is roughly equivalent to the statewide average (13.0 percent vs. 13.2 percent). Personnel turnover tends to be highest in Retail Trade (15.8 percent), followed by Construction (14.1 percent), Agriculture, Forestry, and Fishing (13.7 percent), and Services (13.4 percent).
- Weekly wages were highest in Utilities (\$1,293), followed by Federal Government (\$994), Management (\$959), Finance/Insurance (\$940), and Professional/Technical Services (\$912).
- Industries with the largest proportion of workers at or near retirement age (55 and above) are Wholesale Trade (16.4 percent), Services (15.8 percent), Agriculture, Forestry, and Fishing (15.2 percent), and Mining (15.2 percent).
- Employment projections indicate that between 1998 and 2008, most employment growth will occur in Services (11,775 additional jobs) and Retail Trade (2,909 additional jobs). In contrast, Manufacturing; Federal Government; and Agriculture, Forestry, and Fishing are projected to lose 121, 65, and 32 jobs respectively.
- Employment projections also indicate that between 1998 and 2008, the biggest growth in occupational employment will be in Registered Nurses (1,140 openings), Secondary School Teachers (590 openings), Receptionists (470 openings), and Nursing Aides/Orderlies (460 openings). Alternatively, the biggest declines in occupational employment will be in Textile Machine Operators, Private Childcare Workers, and Farm Equipment Operators.
- Based on January 2004 Unemployment data, the largest pools of available workers are in the Construction and Extraction, Office and Administrative Support, Management, Production, Transportation and Materials Moving, and Sales occupations.



Unemployment Rate Trends



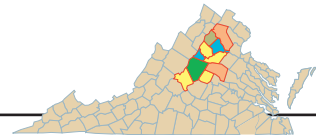


Employers by Size of Establishment

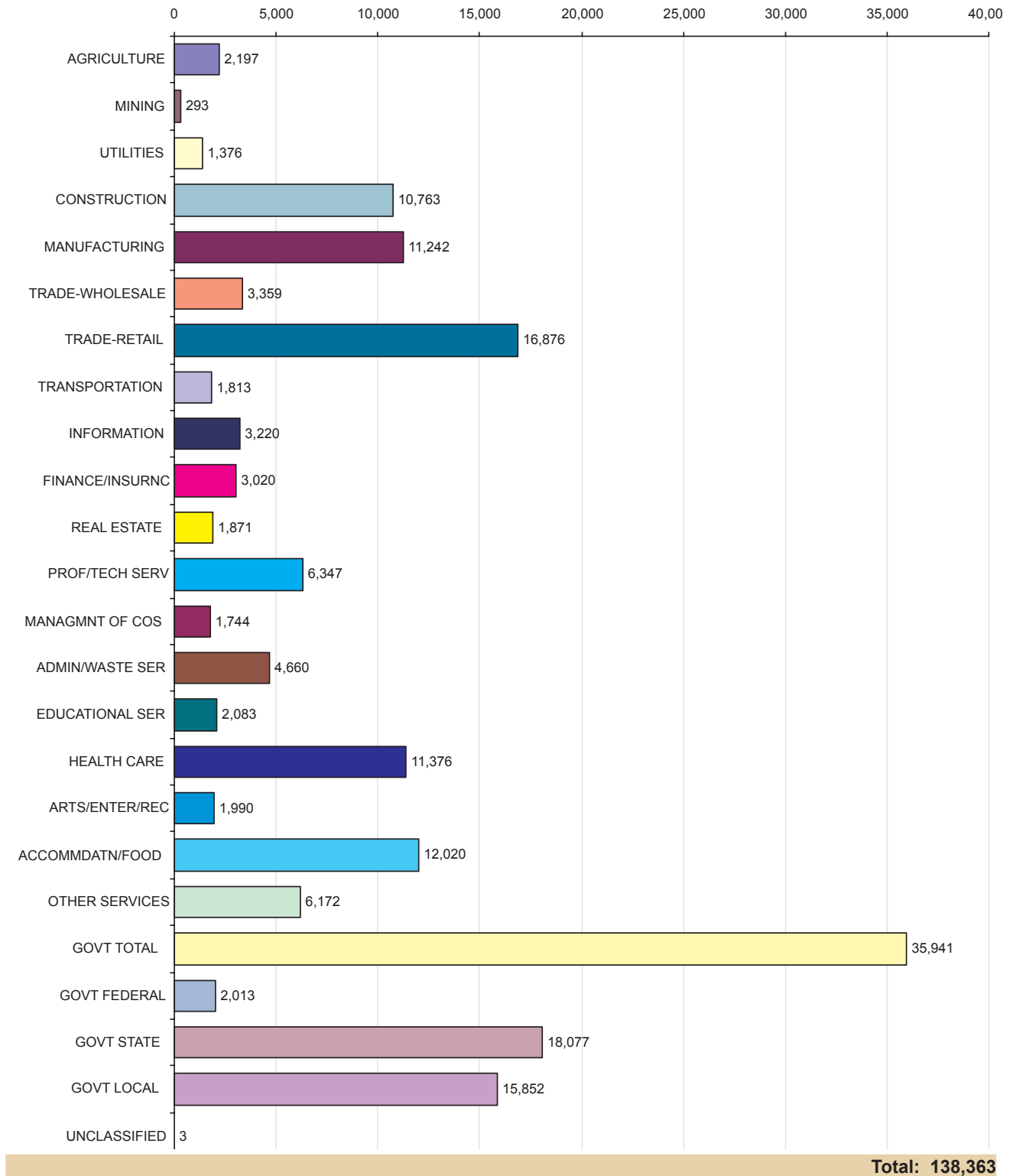
Number of Employees	WIA VI	Virginia
0 - 4	5,701	107,195
5 - 9	1,910	35,763
10 - 19	1,215	25,141
20 - 49	807	18,074
50 - 99	230	6,136
100 - 249	111	3,388
250 - 499	29	1,029
500 - 999	15	409
1000 +	8	229
TOTAL	10,026	197,364

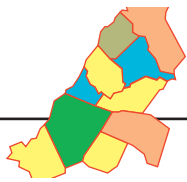
Employment by Size of Establishment

Number of Employees	WIA VI	Virginia
0 - 4	10,535	188,377
5 - 9	12,588	238,634
10 - 19	16,344	340,363
20 - 49	24,082	553,221
50 - 99	15,993	422,392
100 - 249	16,961	503,348
250 - 499	9,636	352,727
500 - 999	9,903	274,493
1000 +	22,492	543,583
TOTAL	138,534	3,417,138



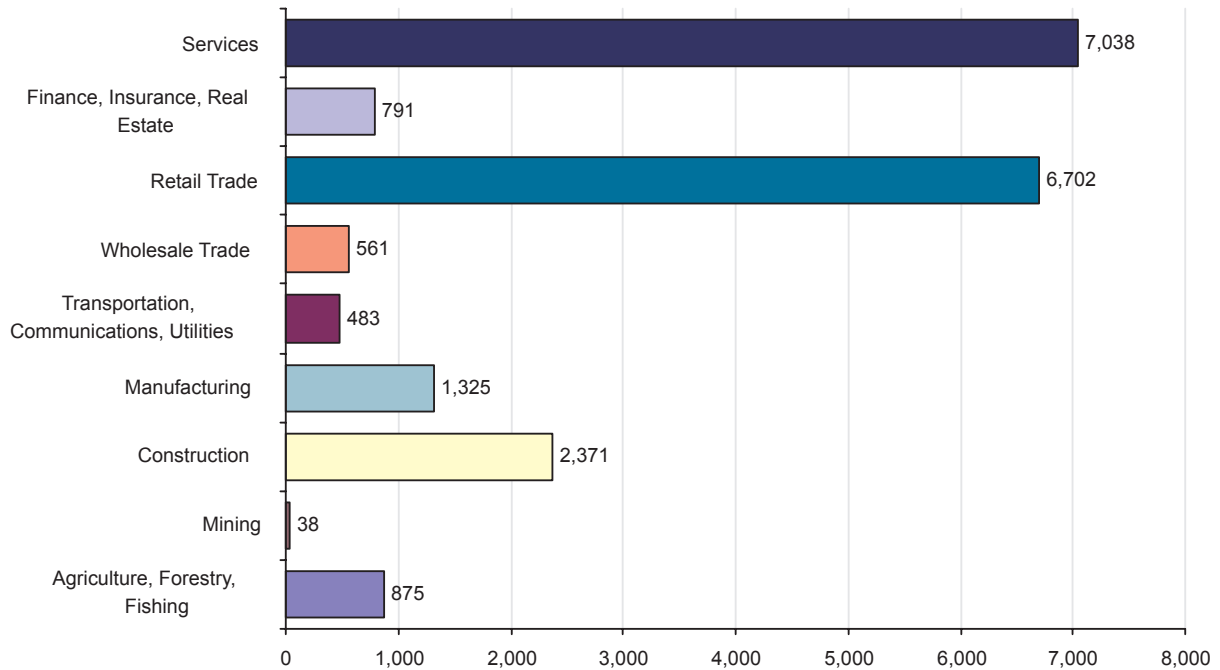
Employment by Industry





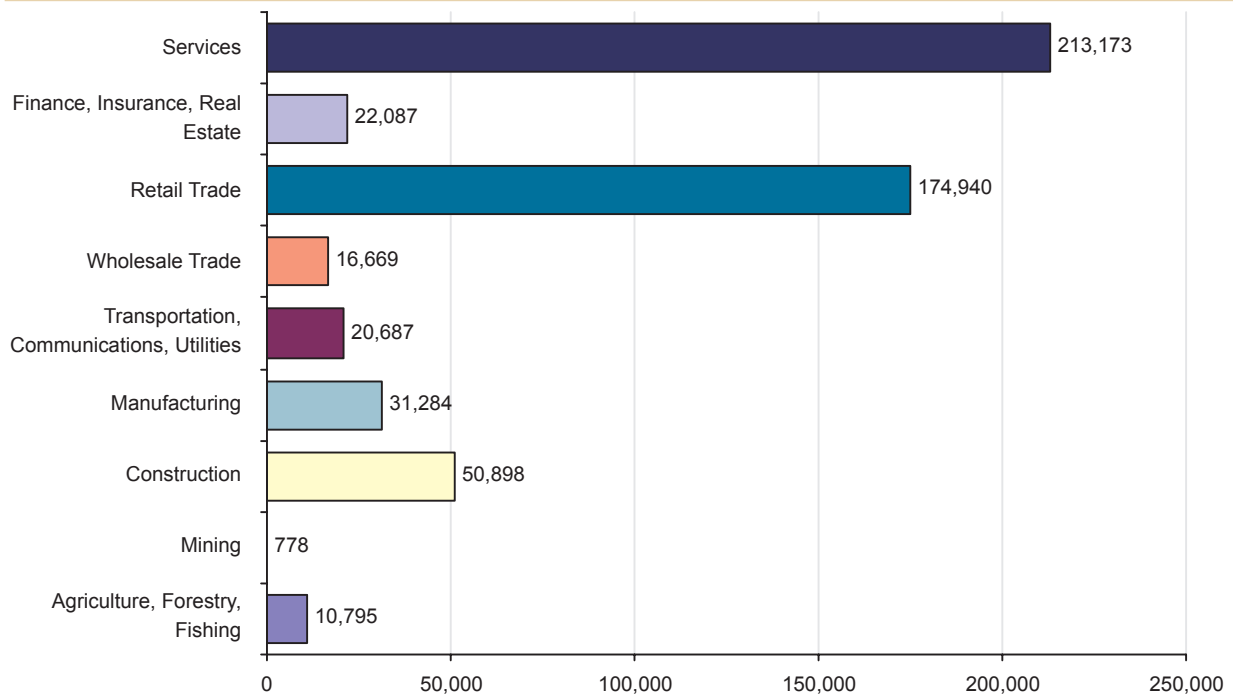
New Hires by Industry

WIA VI

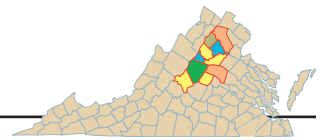


Total: 20,187

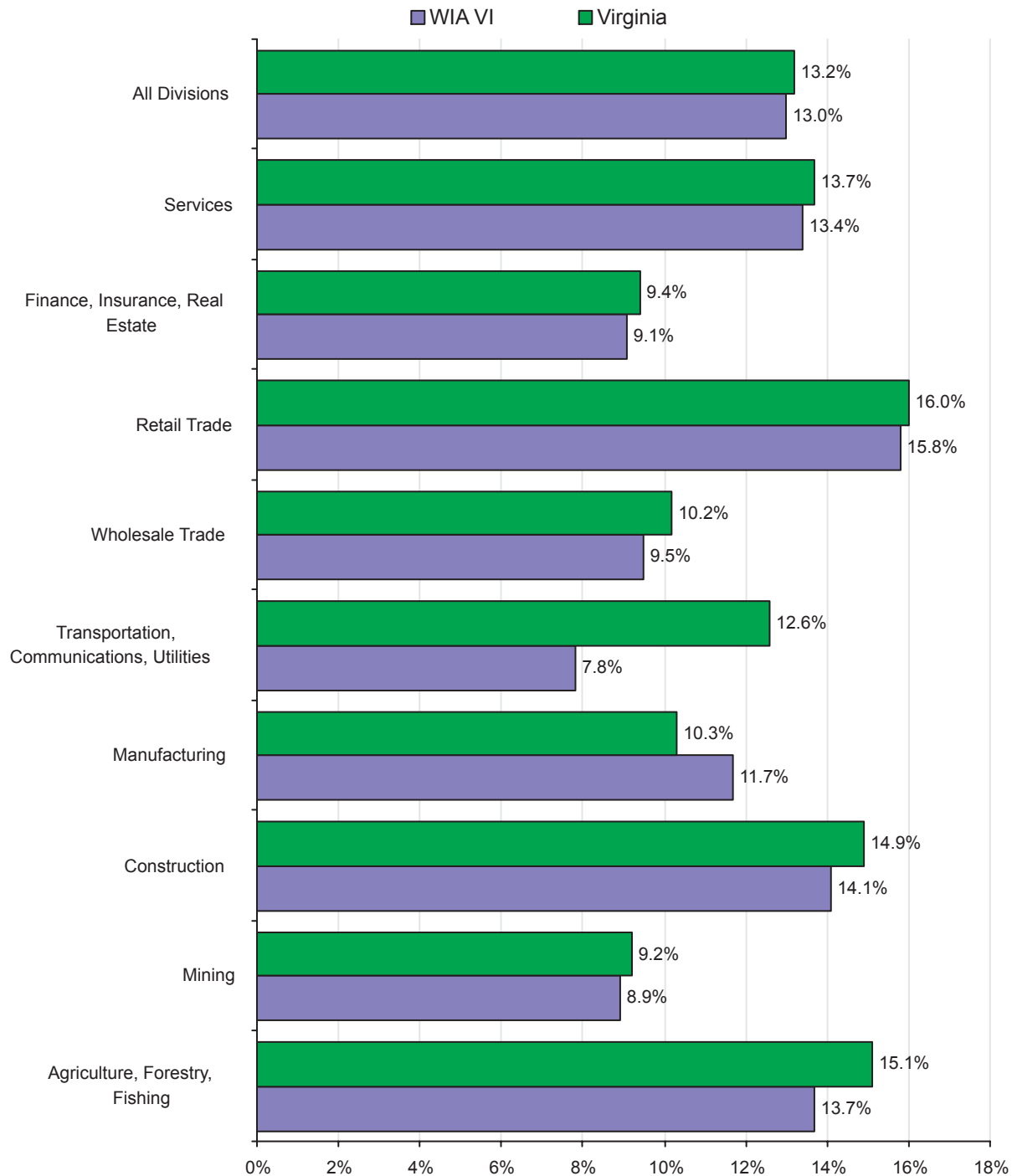
Virginia



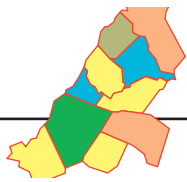
Total: 541,323



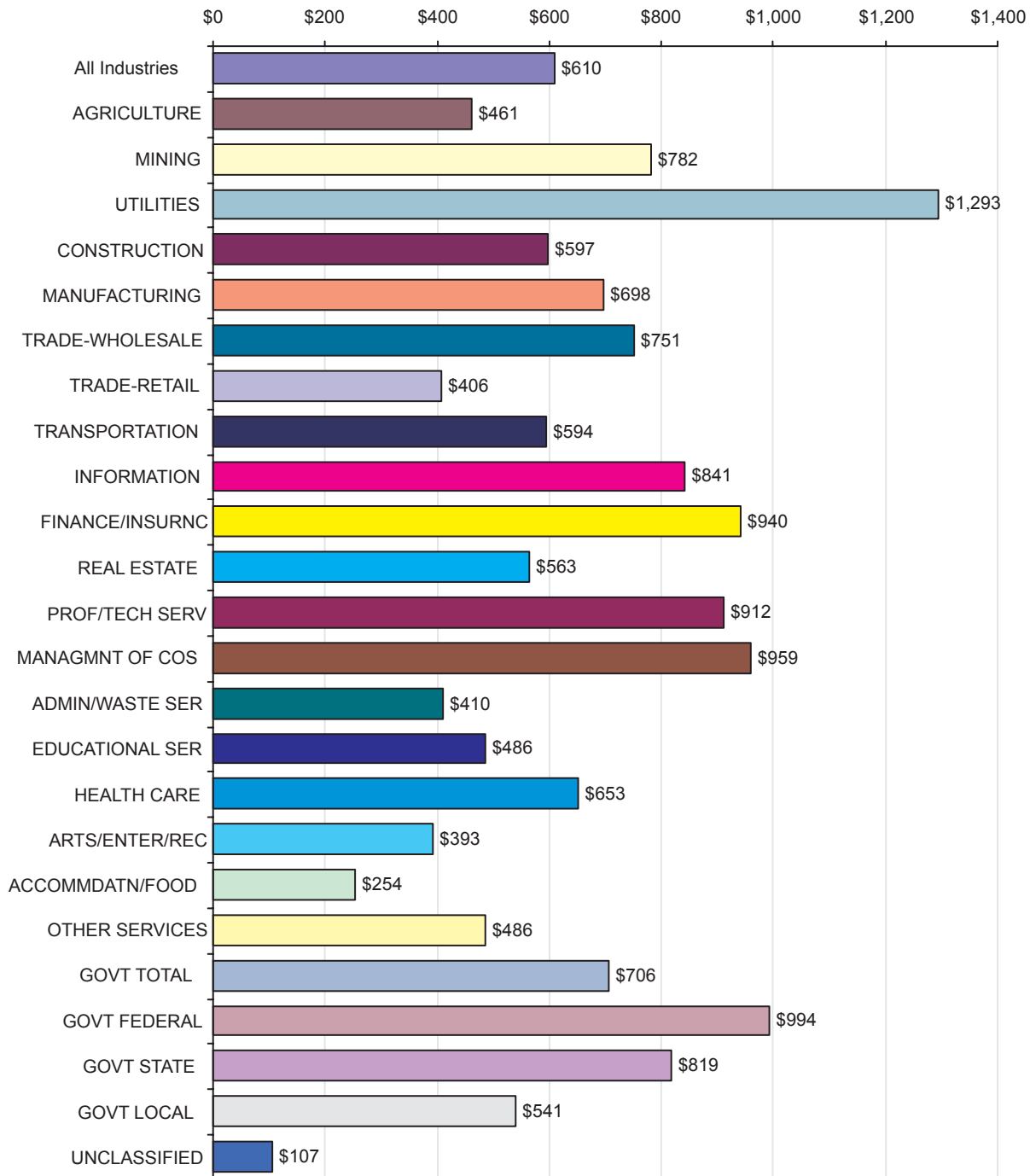
Turnover by Industry



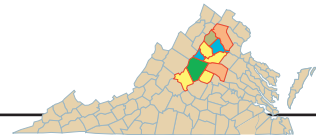
Source: U.S. Census Bureau, Local Employment Dynamics (LED) Program, 2002 annual averages.



Average Weekly Wage by Industry



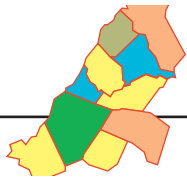
Source: Covered Employment and Wages, annualized 2002.



Age of Workers by Industry

■ WIA VI
 ■ Virginia

	14 - 18	19 - 21	22 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 99	14 - 99
Total Employment	5,035	6,487	6,482	21,384	25,917	21,243	10,571	3,651	100,769
	106,356	162,652	180,601	659,050	739,013	576,728	282,064	81,995	2,788,457
Agriculture, Forestry, and Fishing	212	232	250	856	875	730	355	211	3,717
	2,219	3,048	3,158	9,842	9,481	6,372	2,705	1,600	38,424
Mining	2	10	11	73	87	82	38	9	310
	22	221	366	1,702	2,803	3,498	1,129	136	9,876
Construction	238	667	710	2,435	2,919	2,078	907	312	10,263
	3,907	10,799	13,521	50,770	61,204	41,178	18,359	6,009	205,745
Manufacturing	149	387	623	2,714	3,944	3,330	1,559	345	13,050
	2,142	9,334	14,693	72,949	106,504	94,364	46,938	7,579	354,504
Transportation, Communications, and Utilities	48	162	229	990	1,469	1,407	589	114	5,007
	1,059	4,542	8,097	42,450	52,051	40,960	16,851	3,199	169,208
Wholesale Trade	92	177	239	952	1,173	934	524	177	4,267
	1,691	4,449	6,486	33,407	43,317	32,948	15,708	4,557	142,564
Retail Trade	2,969	2,902	2,137	4,926	5,069	3,832	2,051	877	24,763
	67,335	76,880	57,338	136,252	130,099	94,331	48,135	20,155	630,522
Finance, Insurance, and Real Estate	145	307	413	1,541	1,863	1,545	799	195	6,807
	1,775	7,281	13,158	53,760	56,683	42,503	20,070	5,079	200,308
Services	1,181	1,645	1,873	6,900	8,519	7,308	3,750	1,412	32,585
	26,206	46,097	63,782	257,918	276,866	220,571	112,170	33,682	1,037,291



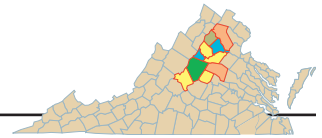
Total Employment by Industry

	Employment			Percent Change	
	Esti- mated 1998	Pro- jected 2008	Change	Total	Annual
Total All Industries	80,481	97,005	16,524	20.53%	1.89%
Agriculture, Forestry and Fishing, Total	2,292	2,260	-32	-1.40%	-0.14%
Mining, Total	118	94	-24	-20.34%	-2.25%
Construction, Total	4,192	4,617	425	10.14%	0.97%
Manufacturing, Total	8,279	8,158	-121	-1.46%	-0.15%
Durable Goods Manufacturing, Total	5,081	5,230	149	2.93%	0.29%
Nondurable Goods Manufacturing, Total	3,198	2,928	-270	-8.44%	-0.88%
Transportation and Public Utilities, Total	3,072	3,456	384	12.50%	1.18%
Transportation, Total	2,007	2,267	260	12.95%	1.23%
Communications and Utilities, Total	1,065	1,189	124	11.64%	1.11%
Wholesale and Retail Trade, Total	16,232	19,288	3,056	18.83%	1.74%
Wholesale Trade, Total	2,125	2,272	147	6.92%	0.67%
Retail Trade, Total	14,107	17,016	2,909	20.62%	1.89%
Finance, Insurance, and Real Estate, Total	4,329	5,017	688	15.89%	1.49%
Services, Total	37,552	49,327	11,775	31.36%	2.77%
Federal Government (Except Post Office)	724	659	-65	-8.98%	-0.94%
State Government (Except Education and Hospitality)	1,031	1,141	110	10.67%	1.02%
Local Government (Except Education and Hospitality)	2,660	2,988	328	12.33%	1.17%

Employment by Major Occupation Group

	Employment			Openings		
	Estimated 1998	Projected 2008	% Change	Replacements	Growth	Total
Total, All Occupations	80,359	96,976	0.21%	19,140	16,617	35,810
Executive, Administrative and Managerial Occupations	5,600	6,606	0.18%	1,030	1,006	2,070
Professional Specialty Occupations	21,871	28,350	0.30%	4,370	6,479	10,880
Marketing and Sales Occupations	8,649	10,487	0.21%	2,660	1,838	4,500
Administrative Support Occupations, Clerical	13,499	15,819	0.17%	2,810	2,320	5,130
Service Occupations	13,610	16,554	0.22%	4,340	2,944	7,300
Agriculture, Forestry, and Fishing Occupations	2,359	2,410	0.02%	660	51	690
Precision Production, Craft and Repair Occupations	6,262	7,001	0.12%	1,350	739	2,070
Operators, Fabricators, and Laborers	8,509	9,749	0.15%	1,920	1,240	3,170

Source: Industry and Occupational Employment Projections, 1998 — 2008.
Projections are for the Charlottesville MSA.



Growth Occupations

	Employment			Openings			Wages
	Estimated 1998	Projected 2008	% Change	Replacements	Growth	Total	Median Annual Wage
Systems Analysts	326	622	90.80%	20	296	320	\$56,842
Computer Support Specialists	286	518	81.12%	20	232	250	\$35,716
Computer Engineers	162	293	80.86%	10	131	140	\$57,277
Medical Assistants	241	400	65.98%	60	159	220	\$24,000*
Health Diagnostics Teachers, Pstscndry	271	413	52.40%	80	142	220	\$89,499
Telemarketers, Door-to-Door Sales	266	402	51.13%	70	136	210	\$23,710*
Social/Human Service Assistants	201	302	50.25%	50	101	150	\$27,158
Home Health Aides	344	514	49.42%	50	170	220	\$18,052
Teachers, Special Education	222	328	47.75%	20	106	130	\$38,633
Teacher Aides, Paraprofessionals	379	554	46.17%	40	175	220	\$18,860*
Hand Packers & Packagers	552	784	42.03%	140	232	370	\$17,428
Physicians	484	686	41.74%	80	202	280	\$114,420
Adjustment Clerks	338	477	41.12%	20	139	160	\$19,784
Teachers, Secondary School	863	1,171	35.69%	280	308	590	\$37,393
Nursing Aides & Orderlies	962	1,294	34.51%	130	332	460	\$20,277
Registered Nurses	2,236	3,001	34.21%	370	765	1,140	\$43,696
Instructors, & Coaches, Sports	309	411	33.01%	30	102	130	\$49,985
Receptionists & Information Clerks	963	1,248	29.60%	180	285	470	\$20,597
Truck Drivers, Light	628	806	28.34%	90	178	270	\$23,078
Guards	510	642	25.88%	130	132	260	\$20,012

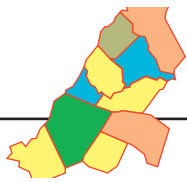
Declining Occupations

	Employment			Openings		
	Estimated 1998	Projected 2008	% Change	Replacements	Growth	Total
Textile Machine Oprs/Tndrs	129	49	-62.02%	20	-80	20
Child Care Workers, Private	152	102	-32.89%	70	-50	70
Cannery Workers	107	82	-23.36%	30	-25	30
Production Inspectors, Graders	199	164	-17.59%	50	-35	50
Farm Equipment Operators	385	340	-11.69%	120	-45	120
Cleaners & Servants, Private	327	292	-10.70%	70	-35	70

Source: Industry and Occupational Employment Projections, 1998 — 2008. 2002 OES Wage Survey data.

Projections are for the Charlottesville MSA. Wages are for WIA VI.

* These figures reflect the median annual wage for Virginia. Wage data for these occupations in WIA VI were not available.

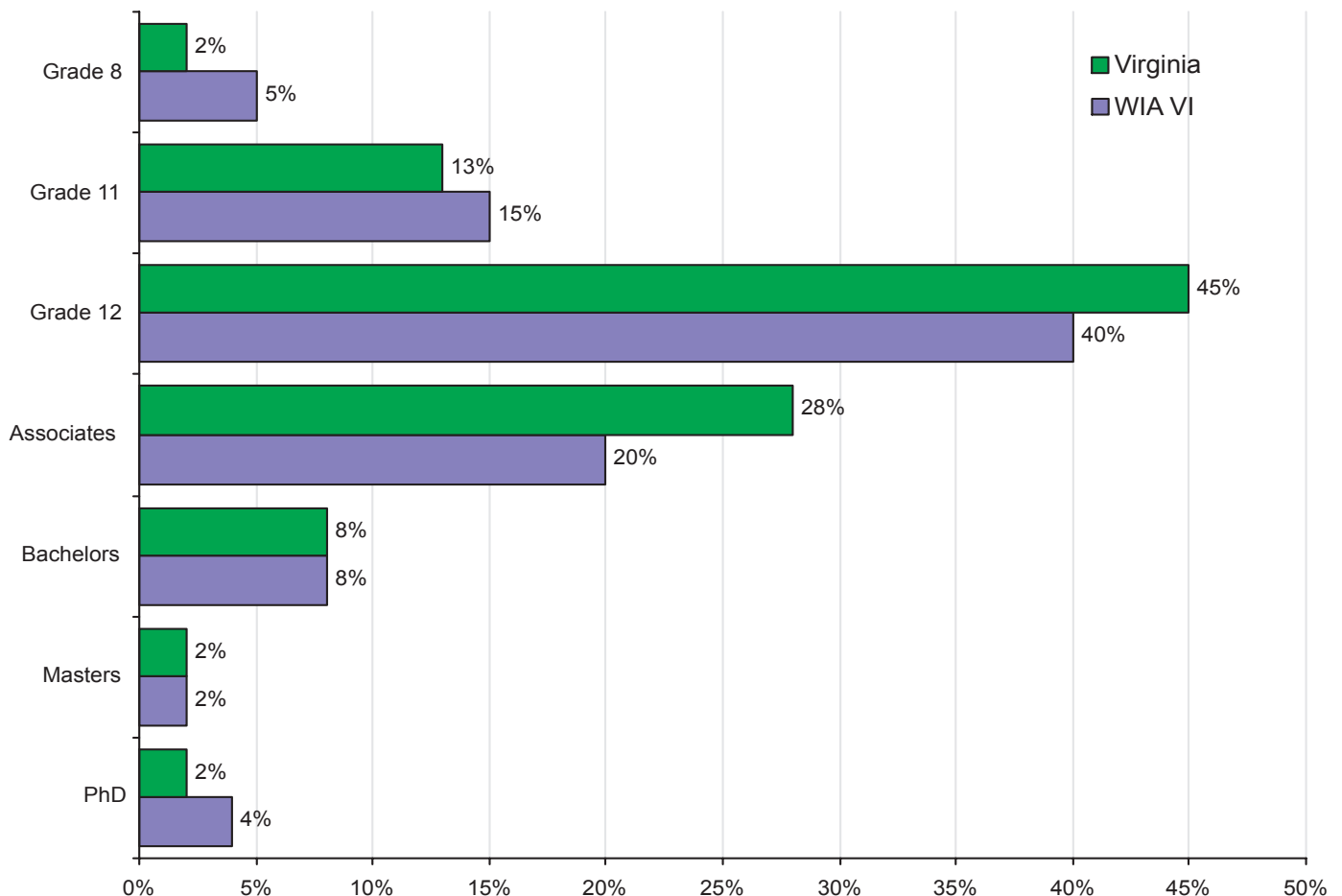


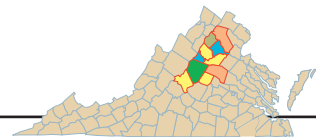
Characteristics of the Unemployed

Marketing the local labor force to new or expanding companies requires information about potential employees that would be available for immediate hire. Monthly data, collected as unemployed individuals apply for unemployment insurance benefits, provide information on various characteristics of the unemployed claimants. Demographic characteristics are recorded for age, race, sex, and education level. In addition, the industry of last employment and the occupation held in the most recent job is also part of the information collected when applicants register for unemployment insurance benefits.

As seen in the chart below, 40% of the unemployed claimants in Workforce Today have a grade 12 education level, which differs only slightly from the 41% of claimants statewide. On the other hand, at the level of Associates degree and higher, Workforce Today has a smaller percentage of claimants relative to the state. While Workforce Today has 1,937 unemployed claimants with at least an Associates degree, some of the other regions of the state have a higher ratio of claimants with post-secondary education.

Unemployed Claimants by Education Level





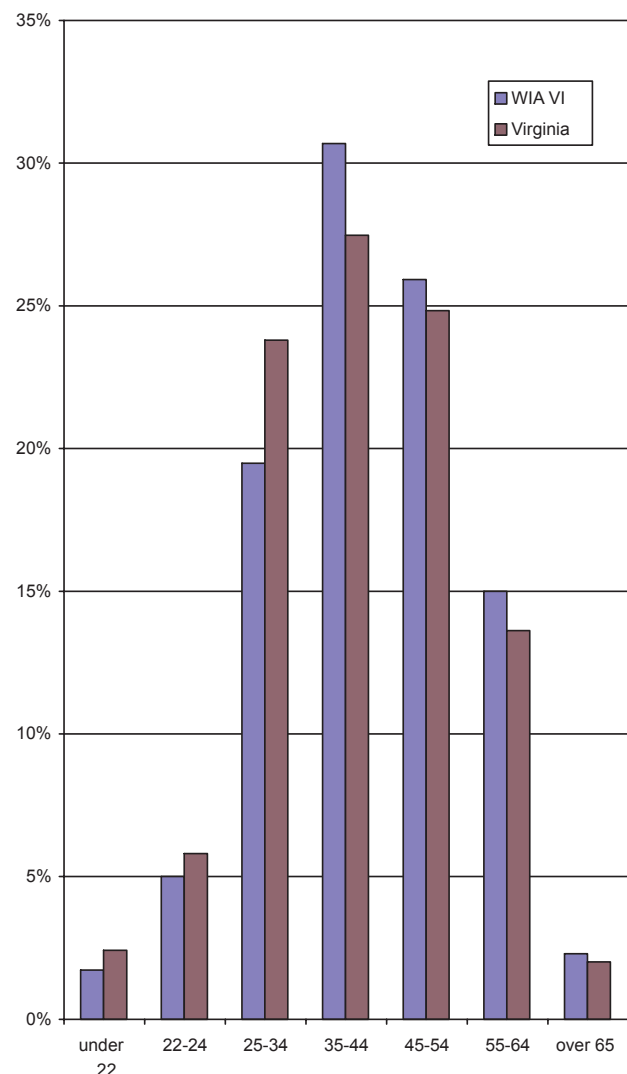
Characteristics of the Unemployed

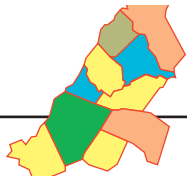
Construction and Extraction workers comprise the largest category of unemployed beneficiaries in Workforce Today, accounting for almost 23% of total claimants in February 2004. Office and Administrative Support and Management workers also account for a significant share of the unemployed claimants, collectively representing over 22% of the total. Employers requiring workers in these occupation categories will find an abundant supply.

Claimants by Occupation

OCCUPATION	Number of Claimants
Management	454
Business and Financial Operations	166
Computer and Mathematical	202
Architecture and Engineering	110
Life, Physical, and Social Science	31
Community and Social Services	20
Legal	28
Education, Training, and Library	80
Arts, Design, Entertainment, Sports, and Media	53
Healthcare Practitioners and Technical	69
Healthcare Support	115
Protective Service	65
Food Preparation and Serving Related	265
Building and Grounds Cleaning and Maintenance	269
Personal Care and Service	71
Sales and Related	426
Office and Administrative Support	799
Farming, Fishing, and Forestry	44
Construction and Extraction	1,295
Installation, Maintenance, and Repair	250
Production	443
Transportation and Material Moving	431
Military Specific	4
SOC INA	
TOTAL	5,690

Claimants by Age

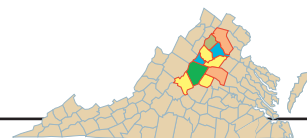




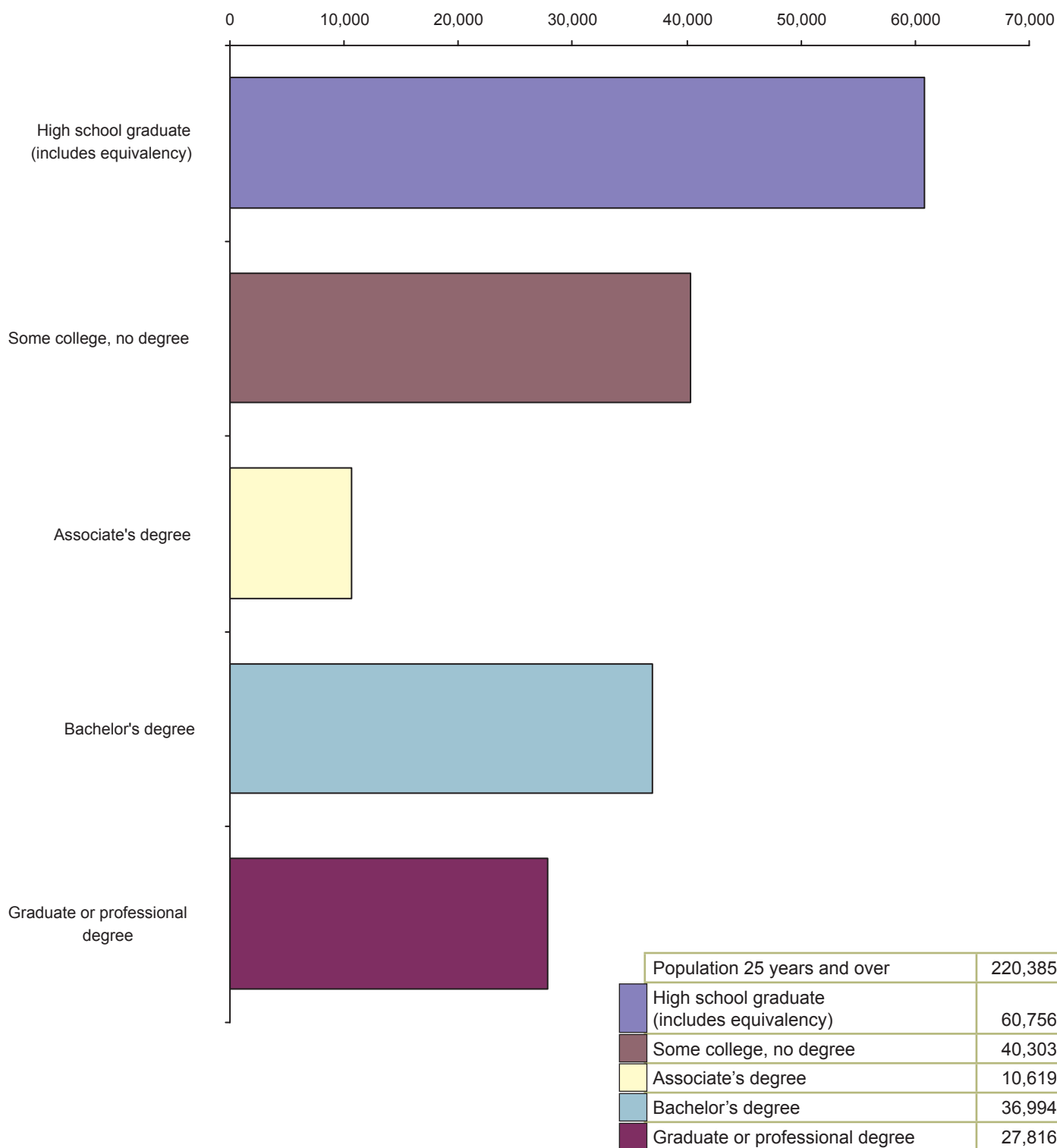
IV. Education Profile

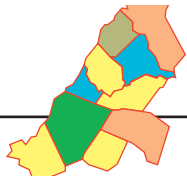
Education data describe the human capital embodied in the current labor force and provide insight into the education and training that will be required to fill the ranks of the future labor force. Some key features of the WIA VI's education and training environment are as follows:

- Educational attainment at the baccalaureate level and above is comparable to the statewide average.
- An assessment of the occupation-driven demand for local training needs indicates that between 1998 and 2008 the greatest demand for graduates from:
 - *Post-secondary vocational programs* will be in Auto Mechanic/Technician and Licensed Practical Nursing.
 - *Associate's degree programs* will be in Registered Nursing.
 - *Baccalaureate degree programs* will be in Accounting; Computer and Information Sciences; and Elementary Teacher Education, and General Education.
- An assessment of the occupation-driven demand for worker skills indicates that between 1998 and 2008 there will be only small changes in required skill levels.



Education Level





Occupation-Driven Training Projection

In this section we use Virginia Employment Commission's (VEC's) occupational employment projections for Charlottesville Metropolitan Statistical Area (MSA),¹ in combination with a crosswalk developed by the National Crosswalk Service Center (NCSC) to "map" occupations into their prerequisite education and training programs.² Often these are many-to-many relationships where one occupation maps into several alternative education and training programs, and one program serves as a conduit into multiple occupations. The analysis is then further refined by using a classification scheme developed by the Bureau of Labor Statistics (BLS) to "sort" occupations according to the minimum degree or award typically required for employment in that occupation.³ Through this combination of steps, we are able to use VEC's occupational employment projections to predict the occupation-driven demand for specific education and training programs within the Charlottesville MSA.⁴ The method used to accomplish this task is not new and has

been successfully employed in earlier studies conducted in several states, including Virginia.⁵

The table that follows depicts the annual occupation-driven demand for training needs in the Charlottesville MSA for the 1998 to 2008 period, as derived from this analysis. As these data show, the largest numbers of needed graduates are in business (*e.g.*, Business Administration and Management), computer technology (Management Information Systems and Data Processing), education (*e.g.*, Elementary Teacher Education and General Education), and health (*e.g.*, Medicine (MD), Registered Nurse, and Licensed Practical Nurse).

1 The Charlottesville Metropolitan Statistical Area is comprised of Albermarle, Fluvanna, and Greene counties, and the city of Charlottesville.

2 The National Crosswalk Service Center (NCSC) is funded by the U.S. Department of Labor, Employment and Training Administration. This crosswalk identifies the prerequisite instructional programs necessary for employment in 651 specific occupations.

3 The Bureau of Labor Statistics classifies occupations according to eleven education and training categories. Four of these involve on-the-job training or work experience only and the remaining seven require some level of postsecondary education (*i.e.*, first-professional degree, doctoral degree, master's degree, bachelor's degree, associate's degree, or postsecondary vocational training). For purposes of this study, we restrict the analysis to occupations that fall within these seven education and training categories.

4 More formally, the demand for education and training programs is calculated as:

$$DCIP_i = \sum DCip_{ij}$$

Where,

$$Dc_{ipij} = (SOC_j)(GCIP_i / \sum GCip_{ij})$$

and,

$DCIP_i$ = the annual demand for instructional program i

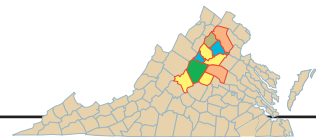
$\sum DCip_{ij}$ = the annual demand for instructional program i across all occupation(s) j

SOC_j = the projected annual openings for occupation j

$GCIP_i$ = Virginia graduates from instructional program i (for academic year 2000-01)

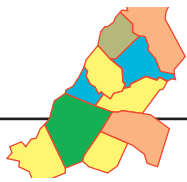
$\sum GCip_{ij}$ = Virginia graduates from all instructional program(s) i (for academic year 2000-01) related to occupation j

5 Similar methods are used in at least seven states (California, Georgia, Idaho, Illinois, New Jersey, Utah, and Virginia) to project anticipated education and training demands. For an excellent exposition of this method see, William J. Drummond and Jan L. Youtie, "Occupational Employment, Demand for College Graduates, and Migration: A Statewide View," a report to the Board of Regents, University System of Georgia, 1999. For an example of how this method has been used previously in Virginia see, A. Fletcher Mangum, "System-Wide Needs Assessment for Virginia Education," State Council of Higher Education for Virginia, March 28, 2002, p.90.



Annual Occupation-Driven Training Needs in the Charlottesville MSA, 1998 – 2008

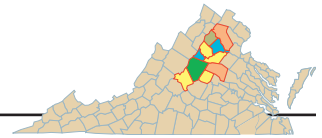
Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Accounting					16			16
Administrative Assistant / Secretarial Science, General							7	7
Aerospace, Aeronautical and Astronautical Engineering					1			1
Agricultural Business and Management, General				1				1
Agricultural Teacher Education (Vocational)					1			1
Animal Sciences, General				1				1
Architecture					2			2
Art Teacher Education					2			2
Art, General				1				1
Auto / Automotive Mechanic / Technician							14	14
Automotive Engineering Tech / Technician							1	1
Barber/Hairstylist							1	1
Bilingual/Bicultural Education					1			1
Biology, General		1						1
Business Administration and Management, General				101	2			103
Business Computer Programming / Programmer					2			2
Business Marketing and Marketing Management				1				1
Business Systems Analysis and Design					1			1
Business Systems Networking and Telecommunications						6		6
Business Teacher Education (Vocational)					1			1



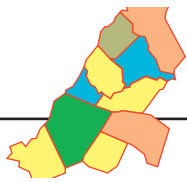
Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Cardiovascular Tech / Technician						4		4
Child Care and Guidance Workers and Managers, General					10			10
Child Care Provider / Assistant					4			4
Child Care Services Manager					1			1
City/Urban, Community and Regional Planning			2					2
Civil Engineering, General					4			4
Communication Disorders, General			1					1
Communication Systems Installer and Repairer							2	2
Computer and Information Sciences, General					19			19
Computer and Information Sciences, Other					1			1
Computer Engineering					4			4
Computer Engineering Tech / Technician						1		1
Computer Main. Tech / Technician							1	1
Computer Programming					5			5
Computer System Analysis					1			1
Computer Teacher Education					1			1
Cosmetic Services, General							1	1
Cosmetologist							8	8
Counselor Education Counseling and Guidance Services			6					6
Dental Hygienist						5		5
Dentistry (DDS, DMD)	2							2
Design and Applied Arts, Other					1			1
Design and Visual Communications					2			2
Dietetics / Human Nutritional Services					1			1
Economics, General					2			2

Education Profile

WIA VI



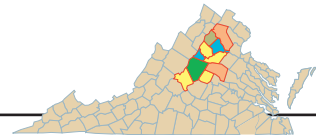
Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Education Administration and Supervision, General				7				7
Education Administration and Supervision, Other				1				1
Education, General				13	44			57
Electrical and Electronic Engineering – Related Tech / Technician						2		2
Electrical, Electronic and Communications Engineering Tech / Technician						2		2
Electrical, Electronics and Communication Engineering					13			13
Elementary Teacher Education					25			25
Elementary, Middle and Secondary Education Administration				1				1
Emergency Medical Tech / Technician							4	4
Engineering / Industrial Management				9				9
English Teacher Education					3			3
Enterprise Management and Operation, General				1				1
Farm and Ranch Management				1				1
Fashion Design and Illustration					1			1
Finance, General				11	9			20
Financial Planning					1			1
Fine/Studio Arts				1				1
Foods and Nutrition Studies, General					1			1
General Buying Operations					1			1
General Retailing Operations					1			1
Graphic Design, Commercial Art and Illustration				2				2
Health and Physical Education, General					1			1
Health Teacher Education					2			2
Human Resources Management				2	10			12



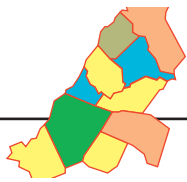
Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Human Resources Management, Other					1			1
Industrial/Manufacturing Engineering					1			1
Information Sciences and Systems					11	7		18
Insurance and Risk Management					3			3
Insurance Marketing Operations					8			8
Interior Design					1			1
International Business				3				3
Investments and Securities					3			3
Junior High / Intermediate / Middle School Teacher Education					1			1
Labor/Personnel Relations and Studies				1	1			2
Law (LLB, JD)	7							7
Law and Legal Studies, Other	1							1
Library Science / Librarianship			6					6
Make-Up Artist							1	1
Management Information Systems and Business Data Processing					9	12		21
Management Science			1					1
Mathematics Teacher Education					2			2
Mechanical Engineering					4			4
Medical Administrative Assistant / Secretary							2	2
Medical Office Management							1	1
Medical Records Tech / Technician						4		4
Medical Transcription							4	4
Medicine (MD)	24							24
Music Teacher Education					4			4
Nursing (RN Training)						92		92
Nursing Anesthetics (Post-R.N.)						1		1
Nursing Science (Post-R.N.)						4		4

Education Profile

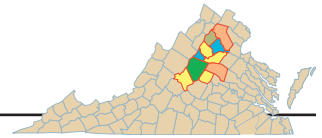
WIA VI



Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Nursing, Family Practice (Post-R.N.)						1		1
Nursing, Other						14		14
Occupational Therapy					3			3
Occupational Therapy Assistant						1		1
Organizational Behavior Studies					2			2
Osteopathic Medicine (D.O.)	4							4
Paralegal/Legal Assistant						6		6
Pharmacy (B. Pharm., Pharm D.)	4							4
Physical Education Teaching and Coaching					10			10
Physical Therapy			5					5
Physical Therapy Assistant						5		5
Physician Assistant					4			4
Practical Nurse (LPN Training)							30	30
Psychiatric / Mental Health Services Technician							2	2
Psychology, General			2					2
Public Administration				6				6
Public Relations and Organizational Communications					3			3
Purchasing, Procurement and Contracts Management					6			6
Reading Teacher Education					6			6
Real Estate					5		3	8
Recreational Therapy					1			1
Recreational Therapy Technician						8		8
School Psychology			1					1
Science Teacher Education, General					1			1
Secondary Teacher Education					6			6
Social Science Teacher Education					1			1
Social Studies Teacher Education					2			2



Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Special Education, General					4			4
Speech-Language Pathology			1					1
Speech-Language Pathology and Audiology			3					3
Surgical/Operating Room Technician							4	4
Taxation					1			1
Teacher Education, Specific Academic and Vocational Programs					3			3
Technical Teacher Education (Vocational)					1			1
Technology Teacher Education / Industrial Arts Teacher Ed					1			1
Trade and Industrial Teacher Education (Vocational)					1			1
Travel Services Marketing Operations							8	8
Veterinarian Assistant / Animal Health Technician						2		2
Veterinary Medicine (DVM)	2							2
Totals	44	1	28	164	307	177	94	815



Work Skills Projection

In this section we use the VEC's occupational employment projections for Charlottesville MSA, in combination with occupational skills profiles developed by ACT,¹ to identify the skill sets that will be required to fill projected annual job openings within the region. The skills categories addressed in this analysis are Applied Mathematics, Applied Technology, Listening, Locating Information, Observation, Reading for Information, Teamwork, and Writing. A description of each category, the skills levels associated with it, and the proportion of projected annual job openings that fall within each skill level follow.

Applied Mathematics

The *Applied Mathematics* assessment measures a person's skill in using mathematical reasoning to solve work-related problems. ACT defines the skills levels associated with this category as follows.

Level 3:

- Perform basic mathematical operations using whole numbers and decimals.
- Convert a number from one form into another using whole numbers, fractions, decimals, or percentages.
- Solve problems that are straightforward, involving a single type of mathematical operation.
- Translate easily from a verbal setup to a mathematical equation when all the information needed to solve the problem is provided in logical order and no unrelated information is included.

Level 4 (in addition to requirements for previous levels):

- Perform one or two mathematical operations using several positive or negative numbers.
- Add commonly known fractions, decimals, or percentages, or add three fractions that share a common denominator.
- Calculate averages, simple ratios, proportions, and rates, using whole numbers and decimals.

- Reorder verbal information before performing calculations.
- Determine which operations to perform and in what order.
- Read a simple chart or graph to obtain the information needed to solve a problem.

Level 5 (in addition to requirements for previous levels):

- Look up and calculate single-step conversions within English or non-English systems of measurement or between systems of measurement.
- Calculate using mixed units and several steps of logic.
- Calculate perimeters and areas of basic shapes.
- Calculate percentage discounts and markups.
- Determine what information, calculations, and unit conversions are needed to find a solution.

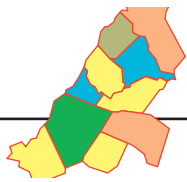
Level 6 (in addition to requirements for previous levels):

- Calculate using negative numbers, fractions, ratios, percentages, and mixed numbers.
- Calculate multiple rates for comparison or use in other calculations.
- Find basic areas and volumes of rectangular solids.
- Identify and correct errors in calculations.
- Solve problems involving considerable setup and multiple-step calculations or conversions.

Level 7 (in addition to requirements for previous levels):

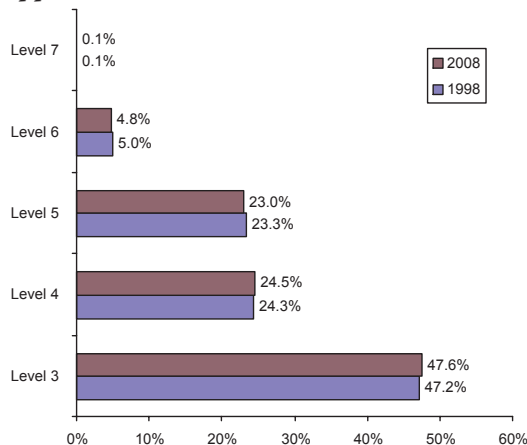
- Calculate using multiple steps of logic.
- Calculate multiple areas and the volumes of spheres, cylinders, and cones.
- Solve problems with more than one unknown.
- Solve problems involving nonlinear functions, such as rates of change.

¹ The occupational skills profiles used in this analysis were provided by ACT. ACT is an independent, non-profit organization that specializes in research and assessment related to education and work. These profiles are based on actual ACT *WorkKeys* assessments of thousands of employed individuals nationally. They represent the most comprehensive and current measure of the work skills required for specific occupations.

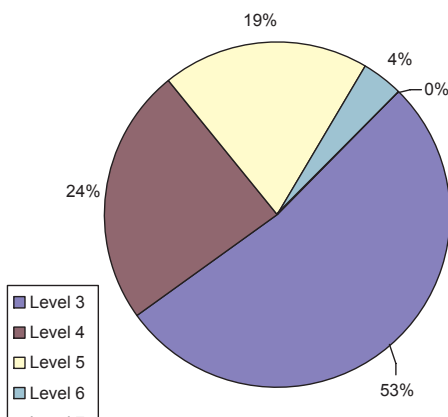


- Calculate by applying basic statistical concepts.
- Derive information needed to solve problems if incomplete or implicit information is presented.

The following figure details the percentage of overall jobs in the Charlottesville MSA in 1998 and 2008 by required *Applied Mathematics* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 3 *Applied Mathematics* skills.



Proportion of Jobs in the Charlottesville MSA by Required Skill Level – Applied Mathematics



Annual Openings in the Charlottesville MSA by Required Skill Level – Applied Mathematics

Applied Technology

The *Applied Technology* assessment measures a person's skill in using the basic principles of mechanics, electricity, fluid dynamics, and thermodynamics to solve

problems with machines, equipment, and structures found in the workplace. ACT defines the skills levels associated with this category as follows.

Level 3:

- Understand the operation of basic hand tools, simple machine components, and uncomplicated systems, such as piping systems, simple electrical heaters, or other equipment found in the home, school, or workplace.
- Apply elementary principles underlying the operation of physical systems, such as the workings of plumbing components or simple electrical systems.

Level 4 (in addition to requirements for previous levels):

- Understand the operation of moderately complex tools, machines, and systems, such as appliances, pulley-driven equipment, or piping systems that carry more than one fluid.
- Apply elementary principles underlying the operation of physical systems, such as a block and tackle or cooling fins.

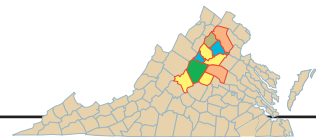
Level 5 (in addition to requirements for previous levels):

- Use the basic principles of mechanics, electricity, thermodynamics, and fluid dynamics in moderate and advanced applications.
- Understand complex machines and systems, such as the operation of gasoline engines, complex appliances, or an electrical system in a building.

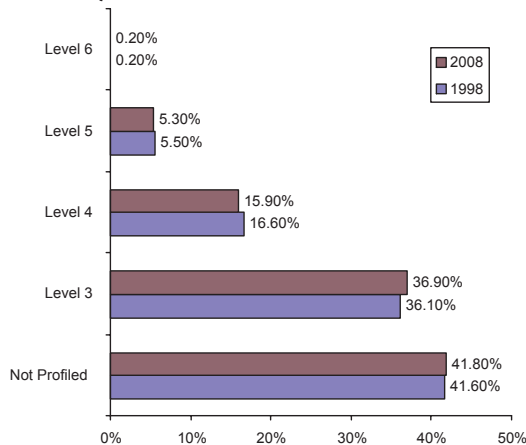
Level 6 (in addition to requirements for previous levels):

- Use principles of mechanics, electricity, thermodynamics, and fluid dynamics interacting in advanced applications such as air conditioning units.
- Troubleshoot complex systems in which a variety of mechanical, electrical, thermal, or flow faults are potential sources of difficult problems.

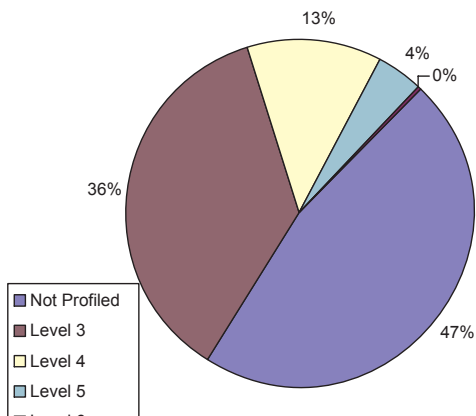
The following figure details the percentage of overall jobs in the Charlottesville MSA in 1998 and 2008 by required *Applied Technology* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job



openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 3 *Applied Technology* skills. The large “Not Profiled” proportion indicates that ACT has not profiled many of these occupations with respect to *Applied Technology* skills. As a result, it is not possible to include them in the analysis.



Proportion of Jobs in the Charlottesville MSA by Required Skill Level – Applied Technology



Annual Openings in the Charlottesville MSA by Required Skill Level – Applied Technology

Listening

The *Listening* portion of the *Listening and Writing* assessment measures a person’s skill in listening to and conveying information. ACT defines the skills levels associated with this category as follows.

Level 1:

- Write down a small amount of useful information based on a spoken communication.

- Give clues to the gist of the situation or provide sources of further information, but do not include enough information to give the receiver a correct understanding of the situation described in the message.

Level 2 (in addition to requirements for previous levels):

- Correctly write down the basic ideas of a spoken message.
- Give a fair amount of useful information, but may miss some of the important details or incorrectly record some of the information.

Level 3 (in addition to requirements for previous levels):

- Listen to a spoken communication and record messages that are basically correct.
- Present all the primary details and the relationships among them correctly, but may miss one or two pieces of important information.

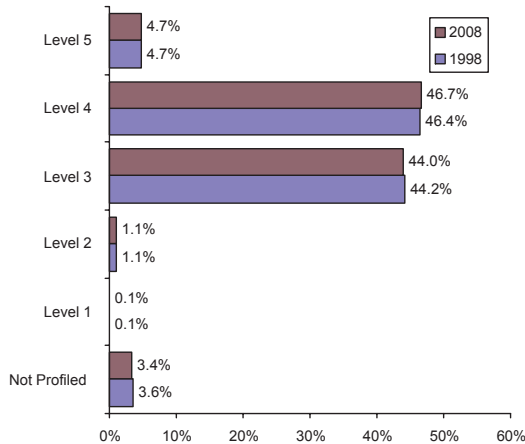
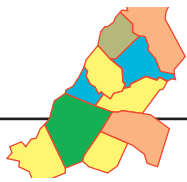
Level 4 (in addition to requirements for previous levels):

- Accurately convey the central idea of a spoken communication.
- Correctly record all the important information and the relationships among pieces of information, but may miss or incorrectly record some details or include irrelevant information.

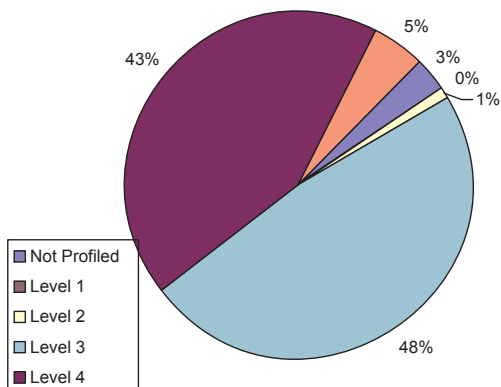
Level 5 (in addition to requirements for previous levels):

- Correctly record all the important information and the relationships among pieces of information from a spoken communication.
- Use supporting details to convey insight into the particular situation the message involves.

The following figure details the percentage of overall jobs in the Charlottesville MSA in 1998 and 2008 by required *Listening* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 3 and Level 4 *Listening* skills.



Proportion of Jobs in the Charlottesville MSA by Required Skill Level – Listening



Annual Openings in the Charlottesville MSA by Required Skill Level – Listening

Locating Information

The *Locating Information* assessment measures a person's skill in using workplace graphics such as diagrams, floor plans, tables, charts, graphs, forms, and instrument gauges. ACT defines the skills levels associated with this category as follows.

Level 3:

- Find one or two pieces of information in a graphic.
- Fill in one or two pieces of information that are missing from a graphic.

Level 4 (in addition to requirements for previous levels):

- Find several pieces of information in graphics.

- Summarize and/or compare information and trends in a single graphic.
- Summarize and/or compare information and trends among more than one graphic by determining the relationships among the graphics.

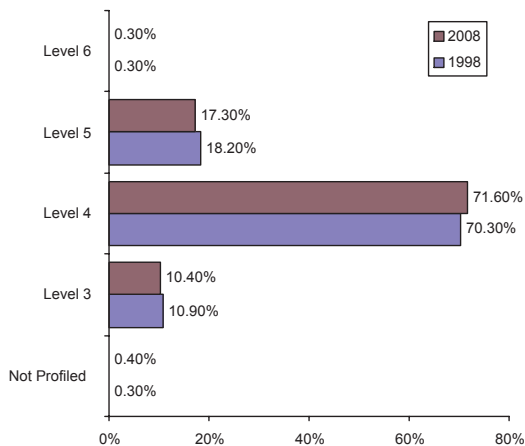
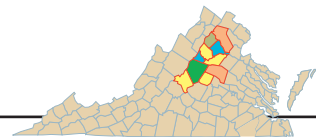
Level 5 (in addition to requirements for previous levels):

- Summarize and/or compare information and trends in a single graphic.
- Sort through distracting information to summarize and/or compare information and trends presented in more than one workplace graphic.

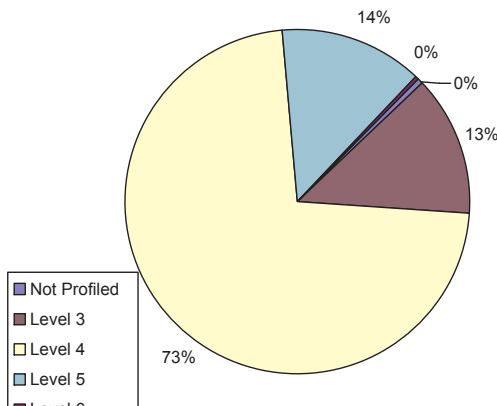
Level 6 (in addition to requirements for previous levels):

- Draw conclusions from the information presented in very detailed graphics.
- Apply information from these types of graphics to specific situations.
- Analyze data within these types of graphics to make decisions and/or predictions requiring judgments based on the information presented.

The following figure details the percentage of overall jobs in the Charlottesville MSA in 1998 and 2008 by required *Locating Information* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the vast majority of jobs will require workers with Level 4 *Locating Information* skills.



Proportion of Jobs in the Charlottesville MSA by Required Skill Level – Locating Information



Annual Openings in the Charlottesville MSA by Required Skill Level – Locating Information

Observation

The *Observation* assessment measures a person's skill at noticing details and paying attention to instructions and demonstrations. The following is a description of the skills levels associated with this area.

Level 3:

- Pay attention.
- Watch and listen to a strongly cued demonstration or set of instructions.
- Recall a few strongly reinforced details of a process or procedure.

Level 4:

- Sustain focused attention on the demonstrated instructions, process, or procedures.
- Select and attend to important details.
- Recall a few important, moderately reinforced details about the demonstrated process or procedure.

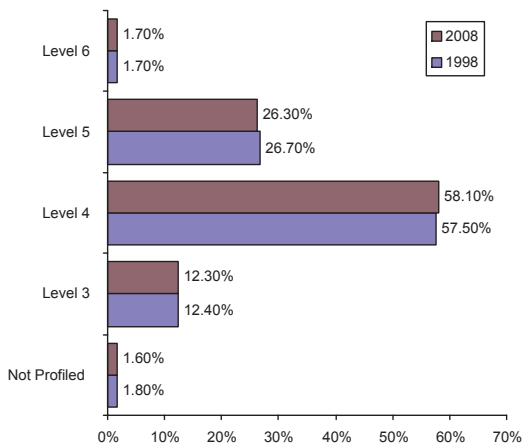
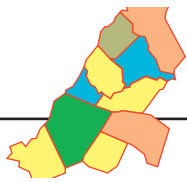
Level 5:

- Focus attention on and recall several important aspects of the information presented.
- Ignore irrelevant background information through selective attention to important details.
- Maintain attention to detail.
- Recall several important details about unfamiliar material.

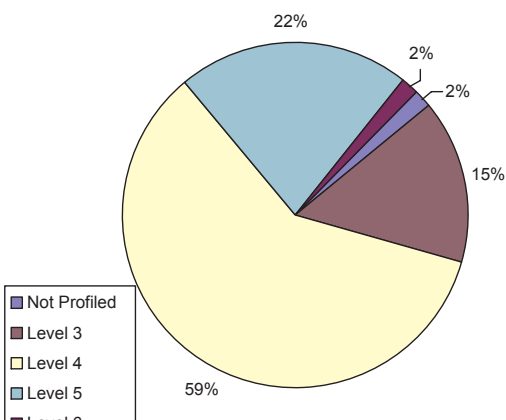
Level 6:

- Notice and remember several details that are relevant to the process or procedure being shown.
- Take in and recall incoming sensory information so it can be used to make predictions, comparisons, or evaluations.
- Visualize how a detail or task fits into the entire process or procedure demonstrated.
- Interpret if-then and cause-effect relationships.

The following figure details the percentage of overall jobs in the Charlottesville MSA in 1998 and 2008 by required *Observation* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 4 *Observation* skills.



Proportion of Jobs in the Charlottesville MSA by Required Skill Level – Observation



Annual Openings in the Charlottesville MSA by Required Skill Level – Observation

Reading for Information

The *Reading for Information* assessment measures a person's skill in reading and using work-related information including instructions, policies, memos, bulletins, notices, letters, manuals, and governmental regulations. ACT defines the skills levels associated with this category as follows.

Level 3:

- Identify uncomplicated key concepts and simple details.
- Recognize the proper placement of a step in a sequence of events, or the proper time to perform a task.
- Identify the meaning of a word that is defined within the document.

- Identify the meaning of a simple word that is not defined within the document.
- Recognize the application of instructions given in the document to situations that are also described in the document.

Level 4:

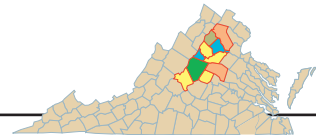
- Identify important details that are less obvious than those in Level 3.
- Recognize the application of more complex instructions, some of which involve several steps, to described situations.
- Recognize cause-effect relationships.
- Determine the meaning of words that are not defined in the document.

Level 5:

- Identify the paraphrased definition of a technical term or jargon that is defined in the document.
- Recognize the application of technical terms or jargon to stated situations.
- Recognize the definition of an acronym that is defined in the document.
- Identify the appropriate definition of a word with multiple meanings.
- Recognize the application of instructions from the document to new situations that are similar to those described in the document.
- Recognize the application of more complex instructions to described situations, including conditionals and procedures with multiple steps.

Level 6:

- Recognize the application of jargon or technical terms to new situations.
- Recognize the application of complex instructions to new situations.
- Recognize, from context, the less common meaning of a word with multiple meanings.
- Generalize from the document situations not described in the document.
- Identify implied details.

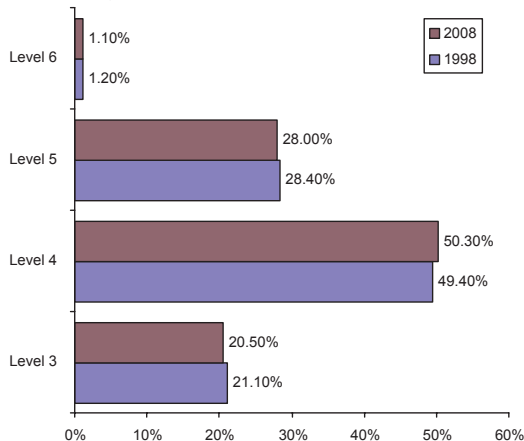


- Explain the rationale behind a procedure, policy, or communication.
- Generalize from the document to a somewhat similar situation.

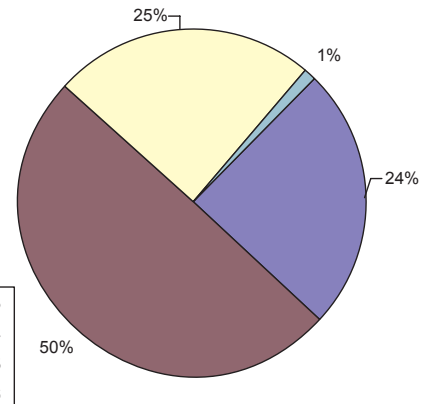
Level 7:

- Recognize the definitions of difficult, uncommon jargon or technical terms, based on the context of the reading materials.
- Figure out the general principles underlying described situations and apply them to situations neither described in nor completely similar to those in the document.

The following figure details the percentage of overall jobs in the Charlottesville MSA in 1998 and 2008 by required *Reading for Information* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 4 *Reading for Information* skills.



Proportion of Jobs in the Charlottesville MSA by Required Skill Level – Reading for Information



Annual Openings in the Charlottesville MSA by Required Skill Level – Reading for Information

Teamwork

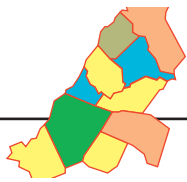
The *Teamwork* assessment measures a person's skill in choosing behaviors and/or actions that simultaneously support relationships within a team and lead toward the accomplishment of work tasks. The following is a description of the skills levels associated with this area.

Level 3:

- Identify team goals and ways to work with other team members to accomplish team goals.
- Recognize that a team is having problems finishing a task and identify the cause of those problems.
- Choose actions that actively support the ideas other team members have for accomplishing team goals.
- Recognize the need for trust and dependability in a team environment.

Level 4:

- Identify the organization of tasks and the time schedule that would help the team reach goals efficiently, creatively, and effectively.
- Select approaches that accept direction from other team members in order to complete tasks and to build and keep up good team relations.
- Identify behaviors that show appreciation for the personal and professional qualities of other team members and respect for their diversity.
- Recognize the need for commitment to quality and sensitivity to customers while pursuing the team goal.



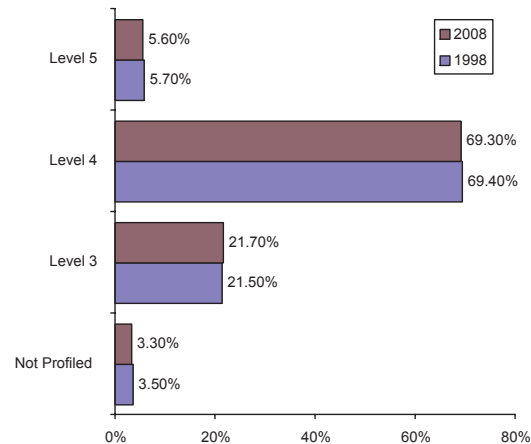
Level 5:

- Identify courses of action that give direction to other team members.
- Determine the best use of team talents to accomplish goals.
- Choose approaches that encourage other team members to improve relationships and/or complete tasks.
- Consider and evaluate the possible effects of alternative behaviors on both team relationships and the completion of tasks.

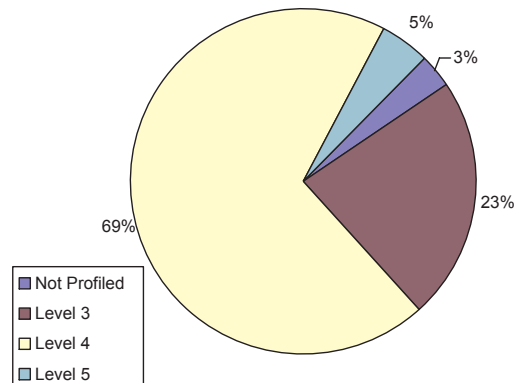
Level 6:

- Identify the focus of team activity and select a new focus if that would help the team meet its goals more effectively.
- Select approaches that show a willingness to give and take direction, as needed, to further team goals (e.g., recognize the organization of team members' tasks that would best serve the larger goals of the team).
- Choose approaches that encourage a team to act as a unit and reach agreement when discussing specific issues.
- Identify actions that would help manage differences of opinion between team members, moving the team toward its goals while valuing and supporting individual diversity.

The following figure details the percentage of overall jobs in the Charlottesville MSA in 1998 and 2008 by required *Teamwork* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 4 *Teamwork* skills.



Proportion of Jobs in the Charlottesville MSA by Required Skill Level – Teamwork



Annual Openings in the Charlottesville MSA by Required Skill Level – Teamwork

Writing

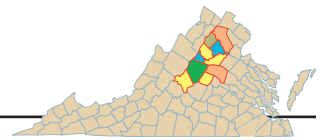
The *Writing* portion of the *Listening and Writing* assessment measures a person's skill in writing work-related messages. ACT defines the skills levels associated with this category as follows.

Level 1:

- Write messages in English that contain a large number of major grammatical, punctuation, spelling, and/or other mechanical errors making the messages very unclear and inconsistent with standard business English.

Level 2:

- Write messages that are generally understandable, but contain many errors in grammar, punctuation,



and/or sentence structure making these messages somewhat difficult to comprehend.

Level 3:

- Write messages that are clear, but may include some incomplete sentences and/or errors in grammar and punctuation.

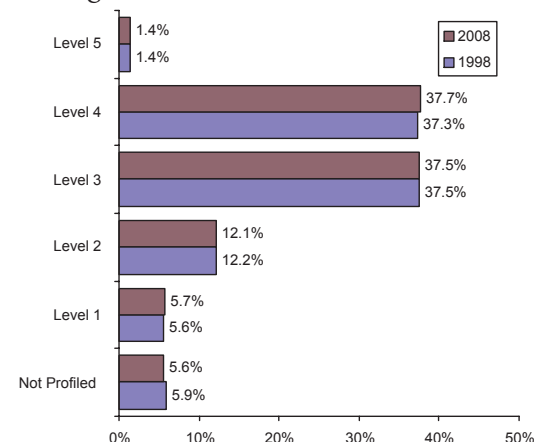
Level 4:

- Write messages that are clear and generally consistent with standard business English, but may contain a few minor errors in grammar and punctuation, and/or the writing style may lack clear organization and appropriate transitions.

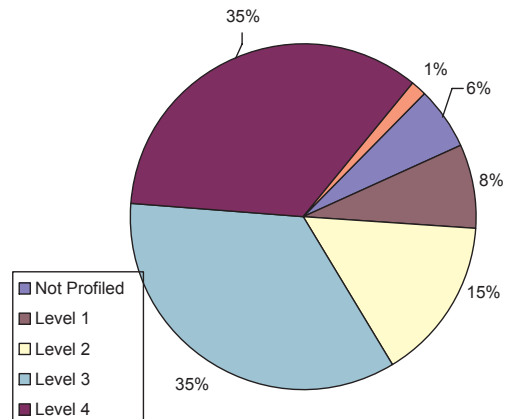
Level 5:

- Write messages that are clear and highly consistent with standard business English.
- Use good sentence structure with a smooth, logical style and no mechanical errors.

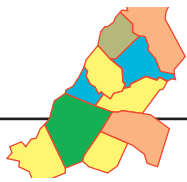
The following figure details the percentage of overall jobs in the Charlottesville MSA in 1998 and 2008 by required *Writing* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 3 and Level 4 *Writing* skills.



Proportion of Jobs in the Charlottesville MSA by Required Skill Level – Writing



Annual Openings in the Charlottesville MSA by Required Skill Level – Writing



Graduate Data

As a compliment to the prior two sections which detailed the likely demand for skilled workers in the region, this section provides data on the current supply

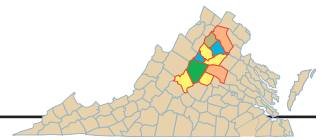
of graduates within WIA VI. These data reflect number of graduates, by institution, and by academic program for the 2002-2003 academic year.¹

Institution	Program (CIP Code)	Cert. <1 yr.	Cert. >1 <2 yr.	Assoc.	BA	1st Prof.	MA	PH.D.
Germanna CC	Special Education, Other (13.1099)	0	2	0	0	0	0	0
Germanna CC	Electrical and Electronic Engin.-Related Technol./Technicians, Other (15.0399)	0	1	5	0	0	0	0
Germanna CC	Liberal Art and Sciences, General Studies and Humanities, Other (24.0199)	0	0	179	0	0	0	0
Germanna CC	Protective Services, Other (43.9999)	0	2	7	0	0	0	0
Germanna CC	Graphic and Printing Equipment Operator, General (48.0201)	0	5	0	0	0	0	0
Germanna CC	Mental Health Services, Other (51.1599)	133	0	0	0	0	0	0
Germanna CC	Nursing (R.N. Training) (51.1601)	0	26	47	0	0	0	0
Germanna CC	Management Information Systems and Business Data Processing, General (52.1201)	0	0	24	0	0	0	0
Germanna CC	Business, General (52.0101)	0	0	24	0	0	0	0
Lord Fairfax CC	Agricultural Business and Management, General (01.0101)	0	0	7	0	0	0	0
Lord Fairfax CC	Electrical and Electronic Engin.-Related Technol./Technicians, Other (15.0399)	0	0	4	0	0	0	0
Lord Fairfax CC	Mechanical Engineering-Related Technol./Technicians, Other (15.0899)	0	1	0	0	0	0	0
Lord Fairfax CC	Engineering-Related Technol./Technicians, Other (15.9999)	0	0	13	0	0	0	0
Lord Fairfax CC	Liberal Art and Sciences, General Studies and Humanities, Other (24.0199)	0	0	227	0	0	0	0
Lord Fairfax CC	Mental Health Services, Other (51.1599)	135	0	0	0	0	0	0
Lord Fairfax CC	Surgical/Operating Room Technician (51.0909)	0	7	0	0	0	0	0
Lord Fairfax CC	Nursing (R.N. Training) (51.1601)	0	28	54	0	0	0	0
Lord Fairfax CC	Administrative Assistant/Secretarial Science, General (52.0401)	0	18	11	0	0	0	0
Lord Fairfax CC	Business, General (52.0101)	0	0	24	0	0	0	0
Lord Fairfax CC	Management Information Systems and Business Data Processing, General (52.1201)	0	0	32	0	0	0	0
Piedmont Virginia CC	Education, General (13.0101)	0	0	15	0	0	0	0
Piedmont Virginia CC	Mechanical Engineering-Related Technol./Technicians, Other (15.0899)	0	0	4	0	0	0	0
Piedmont Virginia CC	Electrical and Electronic Engin.-Related Technol./Technicians, Other (15.0399)	0	0	7	0	0	0	0
Piedmont Virginia CC	General Studies (24.0102)	0	0	25	0	0	0	0
Piedmont Virginia CC	Liberal Arts and Sciences/Liberal Studies (24.0101)	0	0	21	0	0	0	0

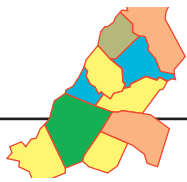
¹ Source: State Council of Higher Education for Virginia, Research Report C1, Completion Summary. Where data for 2002-2003 were not available, 2001-2002 data have been used.

Education Profile

WIA VI



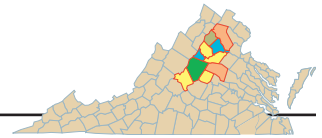
Institution	Program (CIP Code)	Cert. <1 yr.	Cert. >1 <2 yr.	Assoc.	BA	1st Prof.	MA	PH.D.
Piedmont Virginia CC	Biological and Physical Sciences (30.0101)	0	0	15	0	0	0	0
Piedmont Virginia CC	Protective Services, Other (43.9999)	0	19	14	0	0	0	0
Piedmont Virginia CC	Visual and Performing Arts (50.0101)	0	0	1	0	0	0	0
Piedmont Virginia CC	Mental Health Services, Other (51.1599)	57	0	0	0	0	0	0
Piedmont Virginia CC	Nursing (R.N. Training) (51.1601)	0	0	52	0	0	0	0
Piedmont Virginia CC	Business, General (52.0101)	0	0	8	0	0	0	0
Piedmont Virginia CC	Business Administration and Management, General (52.0201)	0	0	45	0	0	0	0
Piedmont Virginia CC	Management Information Systems and Business Data Processing, General (52.1201)	0	0	18	0	0	0	0
Univ of Virginia	Environmental Science/Studies (03.0102)	0	0	0	61	0	6	10
Univ of Virginia	Architecture (04.0201)	0	0	0	59	0	18	0
Univ of Virginia	City/Urban, Community and Regional Planning (04.0301)	0	0	0	19	0	57	0
Univ of Virginia	Landscape Architecture (04.0601)	0	0	0	0	0	12	0
Univ of Virginia	Architecture and Related Programs, Other (04.9999)	0	0	0	6	0	9	1
Univ of Virginia	East Asian Studies (05.0104)	0	0	0	0	0	3	0
Univ of Virginia	Area Studies, Other (05.0199)	0	0	0	25	0	0	0
Univ of Virginia	Afro-American (Black) Studies (05.0201)	0	0	0	10	0	0	0
Univ of Virginia	Computer and Information Sciences, General (11.0101)	0	0	0	74	0	22	6
Univ of Virginia	Special Education, General (13.1001)	0	0	0	0	0	24	0
Univ of Virginia	Counselor Education Counseling and Guidance Services (13.1101)	0	0	0	0	0	28	0
Univ of Virginia	Physical Education Teaching and Coaching (13.1314)	0	0	0	24	0	29	0
Univ of Virginia	Education, General (13.0101)	0	0	0	0	0	112	68
Univ of Virginia	Curriculum and Instruction (13.0301)	0	0	0	0	0	101	2
Univ of Virginia	Education Administration and Supervision, General (13.0401)	0	0	0	0	0	55	24
Univ of Virginia	Higher Education Administration (13.0406)	0	0	0	0	0	0	10
Univ of Virginia	International and Comparative Education (13.0701)	0	0	0	0	0	8	0
Univ of Virginia	Educational Psychology (13.0802)	0	0	0	0	0	71	3
Univ of Virginia	Nuclear Engineering (14.2301)	0	0	0	0	0	0	1
Univ of Virginia	Systems Engineering (14.2701)	0	0	0	100	0	45	6
Univ of Virginia	Engineering, Other (14.9999)	0	0	0	0	0	18	5
Univ of Virginia	Material Engineering (14.1801)	0	0	0	0	0	11	5
Univ of Virginia	Mechanical Engineering (14.1901)	0	0	0	68	0	0	0
Univ of Virginia	Engineering Mechanics (14.1101)	0	0	0	0	0	1	0
Univ of Virginia	Engineering Physics (14.1201)	0	0	0	0	0	3	2
Univ of Virginia	Computer Engineering (14.0901)	0	0	0	30	0	0	0
Univ of Virginia	Electrical, Electronics and Communication Engineering (14.1001)	0	0	0	61	0	28	9



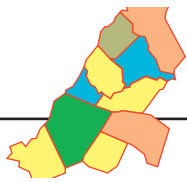
Institution	Program (CIP Code)	Cert. <1 yr.	Cert. >1 <2 yr.	Assoc.	BA	1st Prof.	MA	PH.D.
Univ of Virginia	Civil Engineering, General (14.0801)	0	0	0	44	0	22	2
Univ of Virginia	Bioengineering and Biomedical Engineering (14.0501)	0	0	0	0	0	11	3
Univ of Virginia	Chemical Engineering (14.0701)	0	0	0	38	0	7	7
Univ of Virginia	Aerospace, Aeronautical and Astronautical Engineering (14.0201)	0	0	0	18	0	0	0
Univ of Virginia	Engineering, General (14.0101)	0	0	0	12	0	0	0
Univ of Virginia	Slavic Languages and Literatures (Other Than Russian) (16.0403)	0	0	0	11	0	2	1
Univ of Virginia	German Language and Literature (16.0501)	0	0	0	12	0	1	5
Univ of Virginia	Linguistics (16.0102)	0	0	0	0	0	1	0
Univ of Virginia	French Language and Literature (16.0901)	0	0	0	23	0	4	4
Univ of Virginia	Italian Language and Literature (16.0902)	0	0	0	3	0	3	0
Univ of Virginia	Classics and Classical Languages and Literatures (16.1201)	0	0	0	10	0	5	1
Univ of Virginia	Spanish Language and Literature (16.0905)	0	0	0	63	0	9	5
Univ of Virginia	Law (LL.B., J.D.) (22.0101)	0	0	0	0	351	0	0
Univ of Virginia	Juridical Science/Legal Specialization(LL.M.,M.C.L.,J.S.D./S.J.D.) (22.0104)	0	0	0	0	0	33	0
Univ of Virginia	Comparative Literature (23.0301)	0	0	0	3	0	0	0
Univ of Virginia	English Creative Writing (23.0501)	0	0	0	0	0	11	0
Univ of Virginia	English Language and Literature, General (23.0101)	0	0	0	249	0	42	15
Univ of Virginia	Liberal Arts and Sciences/Liberal Studies (24.0101)	0	0	0	138	0	0	0
Univ of Virginia	Biology, General (26.0101)	0	0	0	153	0	1	5
Univ of Virginia	Neuroscience (26.0608)	0	0	0	0	0	0	2
Univ of Virginia	Cell Biology (26.0401)	0	0	0	0	0	0	4
Univ of Virginia	Microbiology/Bacteriology (26.0501)	0	0	0	0	0	0	9
Univ of Virginia	Biochemistry (26.0202)	0	0	0	0	0	0	4
Univ of Virginia	Biophysics (26.0203)	0	0	0	0	0	1	1
Univ of Virginia	Pharmacology, Human and Animal (26.0705)	0	0	0	0	0	0	2
Univ of Virginia	Physiology, Human and Animal (26.0706)	0	0	0	0	0	0	3
Univ of Virginia	Mathematical Statistics (27.0501)	0	0	0	0	0	2	1
Univ of Virginia	Applied Mathematics, General (27.0301)	0	0	0	2	0	0	0
Univ of Virginia	Mathematics (27.0101)	0	0	0	22	0	8	9
Univ of Virginia	Multi/Interdisciplinary Studies, Other (30.9999)	0	0	0	10	0	0	0
Univ of Virginia	Biological and Physical Sciences (30.0101)	0	0	0	0	0	16	0
Univ of Virginia	Science, Tech. and Society (30.1501)	0	0	0	0	0	4	0
Univ of Virginia	Religion/Religious Studies (38.0201)	0	0	0	89	0	19	12
Univ of Virginia	Philosophy (38.0101)	0	0	0	31	0	4	0
Univ of Virginia	Physics, General (40.0801)	0	0	0	16	0	10	12
Univ of Virginia	Chemistry, General (40.0501)	0	0	0	85	0	13	16
Univ of Virginia	Astronomy (40.0201)	0	0	0	9	0	5	3

Education Profile

WIA VI

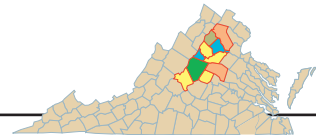


Institution	Program (CIP Code)	Cert. <1 yr.	Cert. >1 <2 yr.	Assoc.	BA	1st Prof.	MA	PH.D.
Univ of Virginia	Psychology, General (42.0101)	0	0	0	242	0	13	7
Univ of Virginia	Clinical Psychology (42.0201)	0	0	0	0	0	0	7
Univ of Virginia	Anthropology (45.0201)	0	0	0	65	0	6	5
Univ of Virginia	Economics, General (45.0601)	0	0	0	327	0	32	5
Univ of Virginia	Political Science, General (45.1001)	0	0	0	146	0	11	1
Univ of Virginia	History, General (45.0801)	0	0	0	146	0	21	12
Univ of Virginia	International Relations and Affairs (45.0901)	0	0	0	164	0	13	5
Univ of Virginia	Sociology (45.1101)	0	0	0	91	0	9	3
Univ of Virginia	Art, General (50.0701)	0	0	0	61	0	0	0
Univ of Virginia	Drama/Theater Arts, General (50.0501)	0	0	0	17	0	0	0
Univ of Virginia	Art History, Criticism and Conservation (50.0703)	0	0	0	0	0	6	2
Univ of Virginia	Music, General (50.0901)	0	0	0	22	0	2	0
Univ of Virginia	Speech-Language Pathology and Audiology (51.0204)	0	0	0	8	0	11	0
Univ of Virginia	Medicine (M.D.) (51.1201)	0	0	0	0	129	0	0
Univ of Virginia	Medical Clinical Sciences (M.S., Ph.D.) (51.1401)	0	0	0	0	0	1	0
Univ of Virginia	Nursing (R.N. Training) (51.1601)	0	0	0	101	0	34	10
Univ of Virginia	Health Professions and Related Sciences, Other (51.9999)	0	0	0	0	0	13	0
Univ of Virginia	Management Information Systems and Business Data Processing, General (52.1201)	0	0	0	0	0	43	0
Univ of Virginia	Business Administration and Management, General (52.0201)	0	0	0	0	0	244	2
Univ of Virginia	Business, General (52.0101)	0	0	0	318	0	0	0
Univ of Virginia	Accounting (52.0301)	0	0	0	0	0	119	0



WIA VI Training Providers List

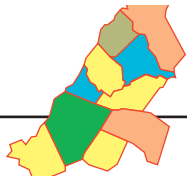
Provider Name	Contact Information	List of Programs/Courses
Central Virginia School of Cosmetology	222 East Main Street Louisa VA 23093 Phone: 540-967-0340 Email: jkronander@ns.gemlink.com	Cosmetology Nail Technician
Charlottesville-Albemarle Technical Edu. Center	1000 East Rio Road Charlottesville VA 22901 Phone: 804-973-1945 Email: bbosselman@netscape.net Web: CATEC.org	Apprenticeship Programs Basic Computer Applications BCAA & BCAB -Basic Computer -Beginner MEAA & MEAB - MS Excel 2000 Level I MS Access 2000 MWAA & MWAB - MS Word 2000 Level I Nurse Aide
Culpeper Cosmetology	509 S. Main Street Culpeper VA 22701 Phone: 540-727-8003	Cosmetology
Germanna Community College	2130 Germanna Highway Locust Grove VA 22508-2102 Phone: 540-710-2032 Email: kdunkley@gcc.cc.va.us Web: www.gcc.cc.va.us	college courses
Greene County Technical Education Center	10415 Spotswood Trail Stanardsville VA 22973 Phone: 434-985-5239	Automotive Technology Cosmetology
International Beauty School	2024 Holiday Drive Charlottesville VA 22901 Phone: 434-296-0159 Web: www.internationalbeautyschool.com	Cosmetology Nail Tech
Lord Fairfax Community College	6480 College Street Warrenton VA 20187 Phone: 540-351-1520 Email: lfwilth@lf.vccs.us Web: www.lf.vccs.edu	College Courses
National College of Business and Technology	1819 Emmet Street Charlottesville VA 22901 Phone: 434-295-0136 Email: adm@educorp.edu Web: www.ncbt.edu	Administrative Office Professional Administrative Office Specialist Business Administration Business Administration-Accounting Business Administration-Management Computer Applications Technology Computerized Office Applications Medical Assisting Medical Billing and Coding Medical Transcription Pharmacy Technician Tourism and Hospitality
Piedmont Virginia Community College	501 College Drive Charlottesville VA 22902 Phone: 804-961-5240 Email: aluck@pvcc.cc.va.us Web: www.pvcc.cc.va.us	College Courses



WIA VI Training Providers List

(continued)

Provider Name	Contact Information	List of Programs/Courses
Ralph Brown Consulting	900 West Main Street Charlottesville VA 22903 Phone: 434-973-0238 Email: revrbrown@yahoo.com Web: www.projectfoodchain.org	ServSafe Certification
Regional Adult Education	9432 James Madison Hwy Rapidan VA 22733 Phone: 540-825-0476 Email: pmetzger_dir@yahoo.com	Computer Applications
Richmond School of Health and Technology	702 Charlton Avenue Suite A Charlottesville VA 22902 Phone: 434-245-0400 Email: rshteduc@firstsaga.com	Medical Assistant Practical Nursing
Sherwood Institute Inc	195 Keith Street, Suite 2B Warrenton VA 20186 Phone: 540-349-7177 Email: promeded@msn.com Web: www.medical-office-training.com	Medical Terminology and Diagnostic Coding
Technology Tamers Inc.	1936 Arlington Blvd., Suite 114 Charlottesville VA 22903 Phone: 434-293-3377 Email: dowens@technologytamers.com Web: technologytamers.com	Microsoft Access 2000 Microsoft Excel 2000 Microsoft Outlook 2000 Microsoft Windows 2000 Microsoft Word 2000 QuickBooks Pro
Worksource Enterprises	1311 Carlton Ave Charlottesville VA 22902 Phone: 434-972-1730 Email: Mcelroywse@aol.com	Job Coaching



V. Summary and Conclusions

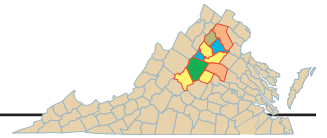
Population trends in WIA VI, as in other parts of the United States, are currently dominated by the aging of the baby-boom generation. Between 2000 and 2010 this demographic phenomena will cause a major increase in the 55 and over population within the region. The net result of this increase will be a significant “graying” of the overall population.

One implication of this is that younger entry-level workers will be in short supply. This should elevate the importance of workforce services in facilitating the efficient and effective use of existing labor resources by getting younger trained workers into the workforce, and retraining or upgrading the skills of older displaced workers.

Another significant trend within WIA VI has to do with relatively flat employment growth in Government (the largest employment sector in the local economy), coupled with increasing employment in Services (especially health care and education) and Retail Trade.

One implication of this relative shift in employment away from Government and toward Services and Retail Trade is likely to be downward pressure on wages. Whereas Government comprised the 8th highest wage sector in the local economy, Retail Trade ranks 18th, Education 14th, and Health Care 10th.

Finally, it is important to note the likely effect that a shift toward Services and Retail Trade will have on the occupation-driven demand for training and worker skills. As demonstrated in this report, it can be anticipated that employment increases in the Service sector – specifically, health care and education – are likely to account for much of the demand for trained workers between 1998 and 2008.



Average Weekly Wage

Albemarle County

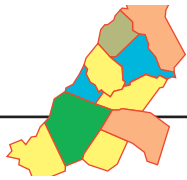
INDUSTRY SECTOR	2002 (\$)
****TOTAL****	\$666
AGRICULTURE	\$429
MINING	\$839
UTILITIES	D
CONSTRUCTION	\$588
MANUFACTURING	\$853
TRADE-WHOLESALE	\$854
TRADE-RETAIL	\$458
TRANSPORTATION	\$558
INFORMATION	\$755
FINANCE/INSURNC	\$880
REAL ESTATE	\$606
PROF/TECH SERV	\$847
MANAGMNT OF COS	\$849
ADMIN/WASTE SER	\$385
EDUCATIONAL SER	\$488
HEALTH CARE	\$726
ARTS/ENTER/REC	\$448
ACCOMMDATN/FOOD	\$280
OTHER SERVICES	\$567
GOVT TOTAL	\$780
GOVT FEDERAL	\$677
GOVT STATE	\$859
GOVT LOCAL	\$576
UNCLASSIFIED	\$0

Culpeper County

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	\$601
AGRICULTURE	\$425
MINING	\$654
UTILITIES	D
CONSTRUCTION	\$639
MANUFACTURING	\$707
TRADE-WHOLESALE	\$687
TRADE-RETAIL	\$366
TRANSPORTATION	\$661
INFORMATION	\$787
FINANCE/INSURNC	\$798
REAL ESTATE	\$539
PROF/TECH SERV	\$1,134
MANAGMNT OF COS	\$1,762
ADMIN/WASTE SER	\$408
EDUCATIONAL SER	D
HEALTH CARE	\$658
ARTS/ENTER/REC	\$253
ACCOMMDATN/FOOD	\$186
OTHER SERVICES	\$456
GOVT TOTAL	\$591
GOVT FEDERAL	\$773
GOVT STATE	\$678
GOVT LOCAL	\$529
UNCLASSIFIED	\$0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Average Weekly Wage

Fauquier County

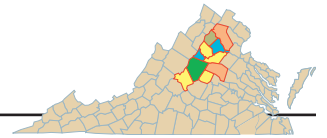
INDUSTRY SECTOR	2002 (\$)
****TOTAL****	\$582
AGRICULTURE	\$562
MINING	D
UTILITIES	D
CONSTRUCTION	\$675
MANUFACTURING	\$699
TRADE-WHOLESALE	\$766
TRADE-RETAIL	\$448
TRANSPORTATION	\$617
INFORMATION	\$714
FINANCE/INSURNC	\$924
REAL ESTATE	\$591
PROF/TECH SERV	\$986
MANAGMNT OF COS	\$788
ADMIN/WASTE SER	\$486
EDUCATIONAL SER	\$462
HEALTH CARE	\$613
ARTS/ENTER/REC	\$326
ACCOMMDATN/FOOD	\$258
OTHER SERVICES	\$453
GOVT TOTAL	\$606
GOVT FEDERAL	\$1,063
GOVT STATE	\$573
GOVT LOCAL	\$576
UNCLASSIFIED	\$0

Fluvanna County

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	\$493
AGRICULTURE	\$446
MINING	D
UTILITIES	D
CONSTRUCTION	\$477
MANUFACTURING	D
TRADE-WHOLESALE	\$654
TRADE-RETAIL	\$303
TRANSPORTATION	\$648
INFORMATION	\$241
FINANCE/INSURNC	\$512
REAL ESTATE	\$679
PROF/TECH SERV	\$518
MANAGMNT OF COS	D
ADMIN/WASTE SER	\$309
EDUCATIONAL SER	D
HEALTH CARE	\$531
ARTS/ENTER/REC	\$205
ACCOMMDATN/FOOD	\$221
OTHER SERVICES	\$348
GOVT TOTAL	\$562
GOVT FEDERAL	\$631
GOVT STATE	\$566
GOVT LOCAL	\$555
UNCLASSIFIED	\$0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Average Weekly Wage

Greene County

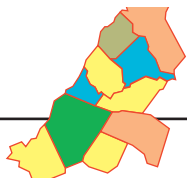
INDUSTRY SECTOR	2002 (\$)
****TOTAL****	\$466
AGRICULTURE	\$394
MINING	D
UTILITIES	D
CONSTRUCTION	\$441
MANUFACTURING	D
TRADE-WHOLESALE	\$701
TRADE-RETAIL	\$348
TRANSPORTATION	\$599
INFORMATION	\$936
FINANCE/INSURNC	D
REAL ESTATE	\$210
PROF/TECH SERV	\$918
MANAGMNT OF COS	D
ADMIN/WASTE SER	\$341
EDUCATIONAL SER	D
HEALTH CARE	\$398
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	\$213
OTHER SERVICES	\$379
GOVT TOTAL	\$491
GOVT FEDERAL	\$734
GOVT STATE	\$594
GOVT LOCAL	\$472
UNCLASSIFIED	\$0

Loudoun County

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	\$657
AGRICULTURE	\$467
MINING	D
UTILITIES	D
CONSTRUCTION	\$524
MANUFACTURING	\$711
TRADE-WHOLESALE	\$682
TRADE-RETAIL	\$305
TRANSPORTATION	\$552
INFORMATION	\$482
FINANCE/INSURNC	\$645
REAL ESTATE	\$520
PROF/TECH SERV	\$693
MANAGMNT OF COS	D
ADMIN/WASTE SER	\$555
EDUCATIONAL SER	D
HEALTH CARE	\$352
ARTS/ENTER/REC	\$268
ACCOMMDATN/FOOD	\$193
OTHER SERVICES	\$385
GOVT TOTAL	\$498
GOVT FEDERAL	\$682
GOVT STATE	\$670
GOVT LOCAL	\$467
UNCLASSIFIED	\$107

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Average Weekly Wage

Madison County

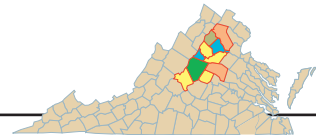
INDUSTRY SECTOR	2002 (\$)
****TOTAL****	\$444
AGRICULTURE	\$481
MINING	D
UTILITIES	D
CONSTRUCTION	\$483
MANUFACTURING	\$543
TRADE-WHOLESALE	\$451
TRADE-RETAIL	\$392
TRANSPORTATION	\$473
INFORMATION	D
FINANCE/INSURNC	\$518
REAL ESTATE	\$186
PROF/TECH SERV	\$437
MANAGMNT OF COS	D
ADMIN/WASTE SER	\$351
EDUCATIONAL SER	D
HEALTH CARE	\$321
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	\$251
OTHER SERVICES	\$387
GOVT TOTAL	\$498
GOVT FEDERAL	\$586
GOVT STATE	\$589
GOVT LOCAL	\$477
UNCLASSIFIED	\$0

Nelson County

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	\$418
AGRICULTURE	\$350
MINING	D
UTILITIES	D
CONSTRUCTION	\$431
MANUFACTURING	\$510
TRADE-WHOLESALE	\$519
TRADE-RETAIL	\$305
TRANSPORTATION	\$339
INFORMATION	\$709
FINANCE/INSURNC	\$635
REAL ESTATE	\$420
PROF/TECH SERV	\$718
MANAGMNT OF COS	D
ADMIN/WASTE SER	\$324
EDUCATIONAL SER	\$515
HEALTH CARE	\$429
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	D
OTHER SERVICES	\$392
GOVT TOTAL	\$524
GOVT FEDERAL	\$584
GOVT STATE	\$541
GOVT LOCAL	\$515
UNCLASSIFIED	\$0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Average Weekly Wage

Orange County

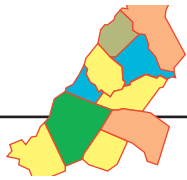
INDUSTRY SECTOR	2002 (\$)
****TOTAL****	\$493
AGRICULTURE	\$424
MINING	D
UTILITIES	D
CONSTRUCTION	\$542
MANUFACTURING	\$617
TRADE-WHOLESALE	\$865
TRADE-RETAIL	\$367
TRANSPORTATION	\$819
INFORMATION	\$703
FINANCE/INSURNC	\$699
REAL ESTATE	\$594
PROF/TECH SERV	\$661
MANAGMNT OF COS	D
ADMIN/WASTE SER	\$349
EDUCATIONAL SER	D
HEALTH CARE	\$345
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	\$171
OTHER SERVICES	\$409
GOVT TOTAL	\$465
GOVT FEDERAL	\$725
GOVT STATE	\$469
GOVT LOCAL	\$453
UNCLASSIFIED	\$0

Rappahannock County

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	\$574
AGRICULTURE	\$434
MINING	D
UTILITIES	D
CONSTRUCTION	\$483
MANUFACTURING	\$648
TRADE-WHOLESALE	\$582
TRADE-RETAIL	\$356
TRANSPORTATION	D
INFORMATION	\$2,220
FINANCE/INSURNC	\$893
REAL ESTATE	\$220
PROF/TECH SERV	\$514
MANAGMNT OF COS	D
ADMIN/WASTE SER	\$395
EDUCATIONAL SER	D
HEALTH CARE	\$254
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	\$405
OTHER SERVICES	\$367
GOVT TOTAL	\$511
GOVT FEDERAL	\$612
GOVT STATE	\$702
GOVT LOCAL	\$489
UNCLASSIFIED	\$0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



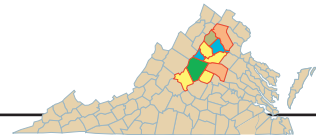
Average Weekly Wage

Charlottesville city

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	\$645
AGRICULTURE	D
MINING	D
UTILITIES	D
CONSTRUCTION	\$630
MANUFACTURING	\$759
TRADE-WHOLESALE	\$730
TRADE-RETAIL	\$393
TRANSPORTATION	\$557
INFORMATION	\$859
FINANCE/INSURNC	\$1,115
REAL ESTATE	\$528
PROF/TECH SERV	\$930
MANAGMNT OF COS	\$1,223
ADMIN/WASTE SER	\$425
EDUCATIONAL SER	\$495
HEALTH CARE	\$696
ARTS/ENTER/REC	\$553
ACCOMMDATN/FOOD	\$258
OTHER SERVICES	\$501
GOVT TOTAL	\$802
GOVT FEDERAL	\$1,118
GOVT STATE	\$834
GOVT LOCAL	\$584
UNCLASSIFIED	\$0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Unemployment Rate Trends

Albemarle County

Year	Rate
2002	2.3
2001	1.9
2000	1.4
1999	1.1
1998	1.2

Year	Rate
1997	1.7
1996	2.1
1995	2.0
1994	2.4
1993	2.7

Culpeper County

Year	Rate
2002	3.3
2001	2.1
2000	1.4
1999	2.0
1998	2.1

Year	Rate
1997	3.3
1996	4.6
1995	4.5
1994	4.4
1993	4.0

Fauquier County

Year	Rate
2002	2.6
2001	1.7
2000	1.0
1999	1.5
1998	1.8

Year	Rate
1997	2.4
1996	2.9
1995	3.2
1994	3.3
1993	3.3

Fluvanna County

Year	Rate
2002	2.6
2001	2.0
2000	1.5
1999	1.1
1998	1.5

Year	Rate
1997	2.4
1996	2.7
1995	3.0
1994	3.8
1993	3.6

Greene County

Year	Rate
2002	3.2
2001	2.0
2000	1.5
1999	1.4
1998	1.4

Year	Rate
1997	3.4
1996	3.1
1995	2.9
1994	3.9
1993	4.0

Lousia County

Year	Rate
2002	5.3
2001	4.4
2000	3.0
1999	3.5
1998	4.7

Year	Rate
1997	7.5
1996	8.8
1995	9.8
1994	8.2
1993	8.6

Madison County

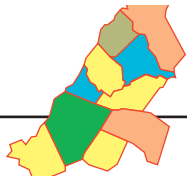
Year	Rate
2002	3.3
2001	1.7
2000	1.5
1999	1.8
1998	1.9

Year	Rate
1997	3.1
1996	3.8
1995	3.1
1994	3.6
1993	3.5

Nelson County

Year	Rate
2002	3.0
2001	3.5
2000	2.3
1999	2.2
1998	2.9

Year	Rate
1997	3.9
1996	4.1
1995	3.7
1994	4.0
1993	4.9



Unemployment Rate Trends

Orange County

Year	Rate
2002	5.3
2001	3.0
2000	2.2
1999	2.5
1998	2.7

Year	Rate
1997	4.3
1996	5.4
1995	4.8
1994	4.6
1993	5.3

Rappahannock County

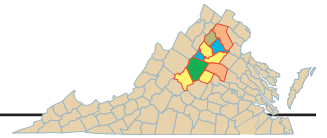
Year	Rate
2002	2.4
2001	1.6
2000	1.3
1999	2.0
1998	2.9

Year	Rate
1997	6.1
1996	3.7
1995	4.9
1994	5.2
1993	4.1

Charlottesville city

Year	Rate
2002	2.8
2001	2.2
2000	1.7
1999	1.8
1998	1.7

Year	Rate
1997	2.6
1996	3.2
1995	2.7
1994	3.3
1993	3.2



Population by Age

Albemarle County

	1990	2000	2010	2020	2030
0-14	13,078	17,528	21,524	25,355	29,339
15-24	12,608	9,503	9,703	9,596	9,472
25-34	12,486	11,824	16,237	19,877	23,397
35-44	11,073	14,192	16,701	19,350	22,472
45-54	6,908	12,825	13,759	14,202	14,505
55+	11,887	18,314	19,275	19,020	18,215
Total	68,040	84,186	97,200	107,400	117,400

Culpeper County

	1990	2000	2010	2020	2030
0-14	6,263	7,275	7,973	9,629	11,244
15-24	3,750	4,300	5,730	6,018	7,044
25-34	4,876	4,637	4,712	6,252	6,602
35-44	4,253	6,020	5,061	5,070	6,602
45-54	2,893	4,762	6,615	5,539	5,406
55+	5,756	7,268	10,909	15,492	17,602
Total	27,791	34,262	41,000	48,000	54,500

Fauquier County

	1990	2000	2010	2020	2030
0-14	11,146	12,201	13,043	15,621	18,326
15-24	6,193	6,120	9,071	8,941	10,723
25-34	8,723	6,365	7,282	10,271	10,253
35-44	8,286	10,355	8,572	9,081	12,384
45-54	5,944	8,692	11,543	9,031	9,683
55+	8,449	11,406	18,689	25,555	27,831
Total	48,741	55,139	68,200	78,500	89,200

Fluvanna County

	1990	2000	2010	2020	2030
0-14	2,688	4,028	5,384	6,165	7,254
15-24	1,518	1,971	3,308	4,161	4,445
25-34	2,151	2,799	2,795	4,043	4,670
35-44	1,882	3,557	4,358	3,888	5,239
45-54	1,332	2,772	4,323	4,896	4,113
55+	2,858	4,920	7,932	11,147	13,481
Total	12,429	20,047	28,100	34,300	39,200

Greene County

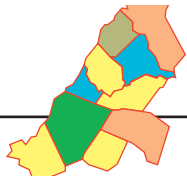
	1990	2000	2010	2020	2030
0-14	2,405	3,595	4,324	5,094	6,127
15-24	1,262	1,599	2,609	3,187	3,612
25-34	1,969	2,272	2,262	3,396	3,806
35-44	1,752	2,784	3,198	3,043	4,344
45-54	1,113	2,126	2,862	3,308	3,109
55+	1,796	2,868	4,244	5,971	7,401
Total	10,297	15,244	19,500	24,000	28,400

Loudoun County

	1990	2000	2010	2020	2030
0-14	4,271	5,166	5,106	5,486	6,278
15-24	2,594	2,780	3,367	3,474	3,809
25-34	3,356	3,096	2,788	3,404	3,569
35-44	3,086	4,560	3,827	3,474	4,278
45-54	2,257	3,904	5,136	4,375	4,008
55+	4,761	6,121	8,876	12,388	14,258
Total	20,325	25,627	29,100	32,600	36,200

2010 - 2030 data are projections.

Source: Virginia Employment Commission 8/03, U.S. Census Bureau.



Population by Age

Madison County

	1990	2000	2010	2020	2030
0-14	2,556	2,440	2,555	2,911	3,315
15-24	1,441	1,436	1,783	1,791	2,067
25-34	1,864	1,389	1,473	1,841	1,897
35-44	1,783	2,065	1,753	1,791	2,167
45-54	1,347	1,914	2,334	1,921	1,967
55+	2,958	3,276	4,201	5,145	5,487
Total	11,949	12,520	14,100	15,400	16,900

Nelson County

	1990	2000	2010	2020	2030
0-14	2,575	2,532	2,721	3,045	3,227
15-24	1,508	1,521	1,653	1,781	2,026
25-34	1,875	1,475	1,884	1,931	1,988
35-44	2,022	2,217	2,056	2,488	2,430
45-54	1,438	2,474	2,237	2,040	2,468
55+	3,360	4,226	4,550	4,614	4,460
Total	12,778	14,445	15,100	15,900	16,600

Orange County

	1990	2000	2010	2020	2030
0-14	4,382	4,929	5,011	6,013	7,259
15-24	2,577	2,704	3,896	3,942	4,460
25-34	3,303	3,015	2,920	4,252	4,320
35-44	3,158	4,169	3,393	3,262	4,670
45-54	2,383	3,559	4,912	3,992	3,740
55+	5,618	7,505	9,868	12,940	14,153
Total	21,421	25,881	30,000	34,400	38,600

Rappahannock County

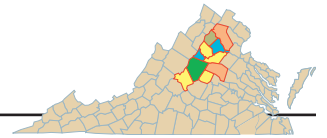
	1990	2000	2010	2020	2030
0-14	1,277	1,295	1,175	1,288	1,432
15-24	764	655	847	804	917
25-34	995	699	546	761	826
35-44	1,136	1,148	692	553	802
45-54	916	1,286	1,230	769	646
55+	1,534	1,900	2,810	3,425	3,277
Total	6,622	6,983	7,300	7,600	7,900

Charlottesville city

	1990	2000	2010	2020	2030
0-14	6,311	5,148	5,374	5,621	5,849
15-24	10,397	14,473	13,029	12,014	11,119
25-34	7,971	5,845	6,917	7,803	8,585
35-44	4,945	4,485	4,695	5,083	5,545
45-54	3,027	3,747	3,583	3,495	3,404
55+	7,690	6,401	6,001	5,584	5,098
Total	40,341	40,099	39,600	39,600	39,600

2010 - 2030 data are projections.

Source: Virginia Employment Commission 8/03, U.S. Census Bureau.



Employment by Industry

Albemarle County

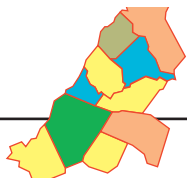
INDUSTRY SECTOR	2002
****TOTAL****	39,479
AGRICULTURE	449
MINING	46
UTILITIES	D
CONSTRUCTION	2,834
MANUFACTURING	3,006
TRADE-WHOLESALE	619
TRADE-RETAIL	4,384
TRANSPORTATION	445
INFORMATION	850
FINANCE/INSURNC	747
REAL ESTATE	786
PROF/TECH SERV	1,496
MANAGMNT OF COS	1,210
ADMIN/WASTE SER	1,368
EDUCATIONAL SER	552
HEALTH CARE	3,410
ARTS/ENTER/REC	971
ACCOMMDATN/FOOD	2,234
OTHER SERVICES	1,658
GOVT TOTAL	12,413
GOVT FEDERAL	66
GOVT STATE	8,958
GOVT LOCAL	3,390
UNCLASSIFIED	0

Culpeper County

INDUSTRY SECTOR	2002
****TOTAL****	13,072
AGRICULTURE	388
MINING	89
UTILITIES	D
CONSTRUCTION	830
MANUFACTURING	1,281
TRADE-WHOLESALE	694
TRADE-RETAIL	1,700
TRANSPORTATION	132
INFORMATION	211
FINANCE/INSURNC	280
REAL ESTATE	107
PROF/TECH SERV	822
MANAGMNT OF COS	159
ADMIN/WASTE SER	484
EDUCATIONAL SER	D
HEALTH CARE	1,459
ARTS/ENTER/REC	105
ACCOMMDATN/FOOD	813
OTHER SERVICES	598
GOVT TOTAL	2,810
GOVT FEDERAL	112
GOVT STATE	992
GOVT LOCAL	1,706
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Employment by Industry

Fauquier County

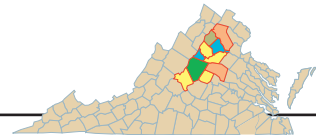
INDUSTRY SECTOR	2002
****TOTAL****	18,766
AGRICULTURE	531
MINING	D
UTILITIES	D
CONSTRUCTION	2,545
MANUFACTURING	1,031
TRADE-WHOLESALE	552
TRADE-RETAIL	2,360
TRANSPORTATION	328
INFORMATION	250
FINANCE/INSURNC	438
REAL ESTATE	203
PROF/TECH SERV	866
MANAGMNT OF COS	181
ADMIN/WASTE SER	642
EDUCATIONAL SER	256
HEALTH CARE	2,034
ARTS/ENTER/REC	525
ACCOMMDATN/FOOD	1,631
OTHER SERVICES	1,114
GOVT TOTAL	3,190
GOVT FEDERAL	198
GOVT STATE	348
GOVT LOCAL	2,644
UNCLASSIFIED	0

Fluvanna County

INDUSTRY SECTOR	2002
****TOTAL****	3,639
AGRICULTURE	30
MINING	D
UTILITIES	D
CONSTRUCTION	401
MANUFACTURING	D
TRADE-WHOLESALE	108
TRADE-RETAIL	247
TRANSPORTATION	121
INFORMATION	6
FINANCE/INSURNC	41
REAL ESTATE	26
PROF/TECH SERV	81
MANAGMNT OF COS	D
ADMIN/WASTE SER	188
EDUCATIONAL SER	D
HEALTH CARE	196
ARTS/ENTER/REC	34
ACCOMMDATN/FOOD	188
OTHER SERVICES	188
GOVT TOTAL	1,103
GOVT FEDERAL	40
GOVT STATE	391
GOVT LOCAL	673
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Employment by Industry

Greene County

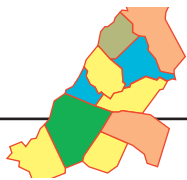
INDUSTRY SECTOR	2002
****TOTAL****	3,809
AGRICULTURE	31
MINING	D
UTILITIES	D
CONSTRUCTION	279
MANUFACTURING	D
TRADE-WHOLESALE	73
TRADE-RETAIL	390
TRANSPORTATION	51
INFORMATION	39
FINANCE/INSURNC	D
REAL ESTATE	20
PROF/TECH SERV	62
MANAGMNT OF COS	D
ADMIN/WASTE SER	66
EDUCATIONAL SER	D
HEALTH CARE	147
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	194
OTHER SERVICES	100
GOVT TOTAL	796
GOVT FEDERAL	44
GOVT STATE	20
GOVT LOCAL	734
UNCLASSIFIED	0

Loudia County

INDUSTRY SECTOR	2002
****TOTAL****	6,224
AGRICULTURE	48
MINING	D
UTILITIES	D
CONSTRUCTION	668
MANUFACTURING	1,363
TRADE-WHOLESALE	146
TRADE-RETAIL	587
TRANSPORTATION	32
INFORMATION	36
FINANCE/INSURNC	93
REAL ESTATE	47
PROF/TECH SERV	124
MANAGMNT OF COS	D
ADMIN/WASTE SER	125
EDUCATIONAL SER	D
HEALTH CARE	218
ARTS/ENTER/REC	36
ACCOMMDATN/FOOD	255
OTHER SERVICES	117
GOVT TOTAL	1,308
GOVT FEDERAL	49
GOVT STATE	144
GOVT LOCAL	1,115
UNCLASSIFIED	3

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Employment by Industry

Madison County

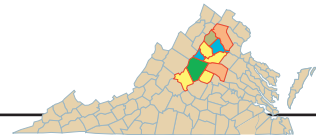
INDUSTRY SECTOR	2002
****TOTAL****	3,458
AGRICULTURE	198
MINING	D
UTILITIES	D
CONSTRUCTION	263
MANUFACTURING	387
TRADE-WHOLESALE	87
TRADE-RETAIL	948
TRANSPORTATION	32
INFORMATION	D
FINANCE/INSURNC	21
REAL ESTATE	13
PROF/TECH SERV	72
MANAGMNT OF COS	D
ADMIN/WASTE SER	17
EDUCATIONAL SER	D
HEALTH CARE	202
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	258
OTHER SERVICES	89
GOVT TOTAL	560
GOVT FEDERAL	76
GOVT STATE	27
GOVT LOCAL	458
UNCLASSIFIED	0

Nelson County

INDUSTRY SECTOR	2002
****TOTAL****	3,508
AGRICULTURE	222
MINING	D
UTILITIES	D
CONSTRUCTION	320
MANUFACTURING	161
TRADE-WHOLESALE	52
TRADE-RETAIL	279
TRANSPORTATION	80
INFORMATION	35
FINANCE/INSURNC	51
REAL ESTATE	65
PROF/TECH SERV	120
MANAGMNT OF COS	D
ADMIN/WASTE SER	96
EDUCATIONAL SER	49
HEALTH CARE	161
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	D
OTHER SERVICES	151
GOVT TOTAL	623
GOVT FEDERAL	58
GOVT STATE	37
GOVT LOCAL	529
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Employment by Industry

Orange County

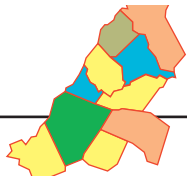
INDUSTRY SECTOR	2002
****TOTAL****	7,746
AGRICULTURE	229
MINING	D
UTILITIES	D
CONSTRUCTION	622
MANUFACTURING	1,350
TRADE-WHOLESALE	463
TRADE-RETAIL	986
TRANSPORTATION	152
INFORMATION	72
FINANCE/INSURNC	120
REAL ESTATE	66
PROF/TECH SERV	214
MANAGMNT OF COS	D
ADMIN/WASTE SER	298
EDUCATIONAL SER	D
HEALTH CARE	222
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	618
OTHER SERVICES	408
GOVT TOTAL	1,811
GOVT FEDERAL	65
GOVT STATE	263
GOVT LOCAL	1,484
UNCLASSIFIED	0

Rappahannock County

INDUSTRY SECTOR	2002
****TOTAL****	1,337
AGRICULTURE	59
MINING	D
UTILITIES	D
CONSTRUCTION	135
MANUFACTURING	58
TRADE-WHOLESALE	39
TRADE-RETAIL	151
TRANSPORTATION	D
INFORMATION	88
FINANCE/INSURNC	19
REAL ESTATE	3
PROF/TECH SERV	61
MANAGMNT OF COS	D
ADMIN/WASTE SER	25
EDUCATIONAL SER	D
HEALTH CARE	47
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	203
OTHER SERVICES	51
GOVT TOTAL	342
GOVT FEDERAL	37
GOVT STATE	13
GOVT LOCAL	292
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Employment by Industry

Charlottesville city

INDUSTRY SECTOR	2002
****TOTAL****	37,327
AGRICULTURE	D
MINING	D
UTILITIES	D
CONSTRUCTION	1,866
MANUFACTURING	938
TRADE-WHOLESALE	527
TRADE-RETAIL	4,846
TRANSPORTATION	441
INFORMATION	1,617
FINANCE/INSURNC	1,171
REAL ESTATE	537
PROF/TECH SERV	2,431
MANAGMNT OF COS	159
ADMIN/WASTE SER	1,354
EDUCATIONAL SER	479
HEALTH CARE	3,281
ARTS/ENTER/REC	178
ACCOMMDATN/FOOD	4,708
OTHER SERVICES	1,700
GOVT TOTAL	10,984
GOVT FEDERAL	1,269
GOVT STATE	6,886
GOVT LOCAL	2,829
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.